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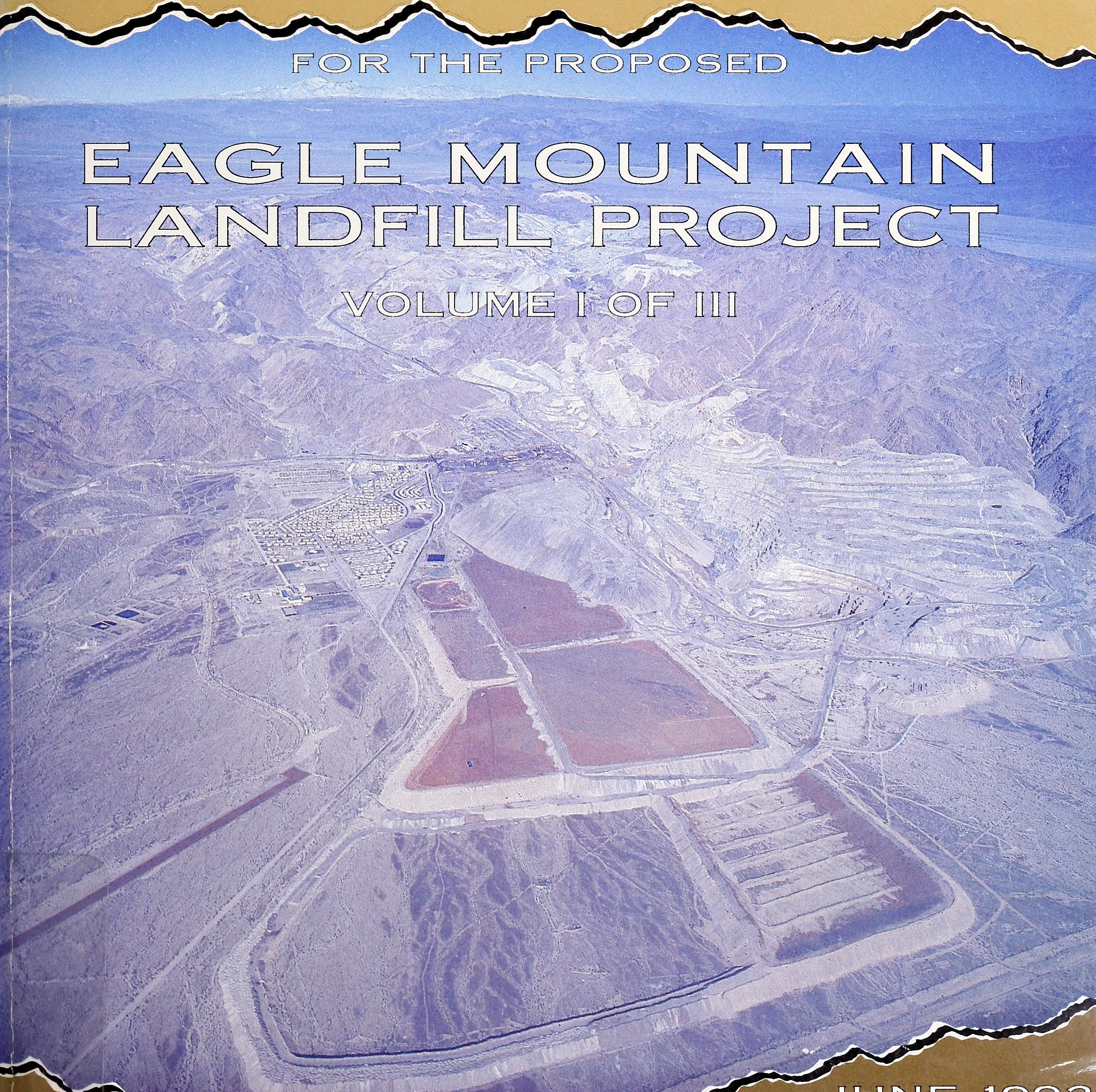
Planning Department

FINAL

ENVIRONMENTAL IMPACT STATEMENT
ENVIRONMENTAL IMPACT REPORT



FOR THE PROPOSED

EAGLE MOUNTAIN LANDFILL PROJECT

VOLUME I OF III

JUNE 1992

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RIVERSIDE COUNTY PLANNING DEPARTMENT
Joseph A. Richards, Planning Director
Keith D. Downs, A.I.C.P., Assistant Director

July 29, 1992

Dear Reader:

In early June of this year you received the Final Environmental Impact Statement and Environmental Impact Report (EIR/EIS) for the proposed Eagle Mountain Landfill Project in Riverside County contained in three-ring binders. Enclosed with this letter is the paperback bound Final EIR/EIS for the Eagle Mountain Landfill Project. This three volume set was presented and reviewed at the June 17, 1992, Riverside County Planning Commission public hearing. At that hearing, the Planning Commission reviewed the editorial changes included with this final printing:

> Modifications to the Mitigation Report/Monitoring Program Checklist, and minor text revisions to provide consistency with these modifications,
>
> Inclusion of the open space acquisition, and general environmental benefit program, developed in consultation with the National Park Service and other groups,
>
> Minor editorial revisions to the text to improve the document's clarity, to reduce redundancy, and to eliminate textual errors identified in public testimony.

Subsequent to the Planning Commission hearing, we discovered an error in the data presented in the revised Figure 48. This figure which illustrates groundwater contours has been replaced in this final printing with a new figure which compiles updated groundwater data through June 1992. Response 001-13a and 13b which referenced this figure have also been revised.

Please replace the earlier version of this Final EIR/EIS with the attached three volume version. The County of Riverside appreciates your participation in this process. If you should have any questions, please contact me at (714) 275-3259.

Sincerely,

RIVERSIDE COUNTY PLANNING DEPARTMENT
Joseph A. Richards, Planning Director

David Mares
David Mares, Planner III

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DM:dm
7/28/92

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United States Department of the Interior

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Palm Springs — South Coast Resource Area
63-500 Garnet Avenue
Post Office Box 2000
North Palm Springs, CA 92258-2000

TD
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1992
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TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

Dear Reader:

Attached is the Final Environmental Impact Statement and Environmental Impact Report (EIS/EIR) for the proposed Eagle Mountain Landfill Project in Riverside County. This Final EIS/EIR includes minor modifications to the proposed action based on public comment, new regulations, and further analysis. Responses to all public comments and statements given at the various public hearings are also included.

The Bureau of Land Management served as the federal lead and the County of Riverside served as the state lead in the preparation of this document. The joint document has been prepared pursuant to the requirements of the National Environmental Policy Act and the California Environmental Quality Act. The attached printed and bound environmental document represents the joint Final EIS/EIR. The Final EIS/EIR will be used to decide on the various discretionary actions by the Bureau and the County. A Record of Decision (ROD) will be prepared by the Bureau, however, a decision will not be made until after the Bureau has received the Biological Opinion from the U.S. Fish and Wildlife Service. It is expected that the Biological Opinion will be received and a decision made before the end of November, 1992.

Comments on the environmental documents or the project will be accepted by the Bureau for a 30 day period following the release of the Final EIS/EIR. Your comments will be considered in arriving at our decision on this proposed action. Please send your comments to:

Bureau of Land Management
Palm Springs - South Coast Resource Area
63-500 Garnet Ave.
P.O. Box 2000
North Palm Springs, CA 92258-2000

We wish to thank those persons who have contributed their time and knowledge to this project. We appreciate your interest and your commitment to participating in this process.

Sincerely,

Russell Kaldenberg

Russell L. Kaldenberg
Area Manager

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FINAL

ENVIRONMENTAL IMPACT STATEMENT
ENVIRONMENTAL IMPACT REPORT NO. 323
FOR THE
EAGLE MOUNTAIN LANDFILL PROJECT
Specific Plan No. 252
State Clearinghouse No. 8908413
(Volume I of III)

Applicant

KAISER STEEL RESOURCES, INC.
and
MINE RECLAMATION CORPORATION

Prepared for

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Ed Hastey 5/22/92
Ed Hastey Date
California State Director

COUNTY OF RIVERSIDE
PLANNING DEPARTMENT

Joseph A Richards 6-3-92
Joseph A. Richards Date
Planning Director

BLM-CA-PT-91-015-2200

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Eagle Mountain Landfill Project, Riverside County, California
Federal Land Exchange and Right-of-Way Approval
County General Plan Amendment and Specific Plan
Final Environmental Impact Statement/Environmental Impact Report

Lead Agencies:

U.S. Department of the Interior
Bureau of Land Management
California Desert District
Palm Springs–South Coast Resource Area

County of Riverside
Riverside, California

Cooperating Agencies:

National Park Service
Joshua Tree National Monument

Bureau of Mines
Western Field Operation Center

Prepared By:

RECON
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County of Riverside
4080 Lemon Street, 9th Floor
Riverside, CA 92501
(714) 275-3290

Abstract:

The Eagle Mountain Landfill Project is a proposed Class III nonhazardous solid waste landfill in an unused open pit mine located at Eagle Mountain in northeastern Riverside County, California. Eagle Mountain is located in the California Desert Conservation Area. The project site is comprised of about 4,684 acres of federal and patented lands. Under the Federal Land Policy and Management Act (FLPMA), about 3,271 acres of Bureau of Land Management (BLM) lands will be transferred to Kaiser Steel Resources, Inc., in exchange for land currently owned by Kaiser Steel Resources, Inc. The BLM lands are necessary for the operation of the landfill and the Kaiser lands contain desirable quality wildlife habitat on the Chuckwalla Bench. Also, a new FLPMA right-of-way would be issued for the entire length of the Eagle Mountain rail line, the existing Eagle Mountain Road, and the proposed Eagle Mountain Road Extension, which begins just south of the Metropolitan Water District (MWD) pumping station.

The landfill itself will comprise 2,262 acres. At full-scale operations, the landfill will accept an inflow of up to 20,000 tons of solid waste per day from throughout southern California for approximately 115 years. Of this total, 18,000 tons per day will be shipped in containers along the Southern Pacific main line to a rail junction at Ferrum, from which it will be transported along the 52-mile Eagle Mountain rail line to the project site. A total of 2,000 tons per day of containerized waste will be delivered by truck. The project will be served by a network of rail and truck transfer stations to be located throughout southern California.

The Eagle Mountain Landfill Specific Plan amends the Riverside County General Plan and Zoning Ordinance and Map to facilitate initiation of a landfill operation at the Eagle Mountain iron ore mine site. The Specific Plan zone is being created to support the addition of landfill and associated land uses on the project site. The design of the landfill includes the use of a composite liner on the entire bottom and side slopes of the pit; a leachate collection, recovery, and treatment system; and a gas collection system. Measures for dust control and a number of other planning and monitoring requirements would also be included in the project. All on-site drainage improvements for protection of run-on into the landfill will be sized to accept 500-year flows. The Specific Plan discusses the relationship of these activities to the project.

The project would contribute particulates and vehicle emissions to the Southeast Desert and South Coast air basins, and would also contribute to the cumulative overdraft of the region's water resources. These are significant impacts which cannot be entirely mitigated. All other potential adverse impacts to the environment either would not be significant or would be mitigated below a significant level through design aspects of the project, implemented either prior to construction of the project or as conditions of county, state, and federal permits applicable to the project.

Other Federal and State Actions:

Endangered Species Act, Section 7 consultation between Bureau of Land Management and U.S. Fish and Wildlife Service
Clean Water Act, Section 404 permit from U.S. Army Corps of Engineers
Solid Waste Facilities Permit from the County of Riverside Department of Health (the Lead Enforcement Agency) and certification by the California Integrated Waste Management Board
California Department of Fish and Game Code, Section 1603 agreement
Discharge Requirements from the Lower Colorado River Regional Water Quality Control Board
Authority to Construct/Permit to Operate from the South Coast Air Quality Management District
Compliance with Section 106 of the National Historic Preservation Act
California Fish and Game Code, Section 2081 permit

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3. Tables Summarizing Emission Factors and Process Rates Used for Mitigated Project (Sierra Research, Inc., December 1991)
4. Level 1 and 2 Visibility Screening Analysis (Sierra Research, Inc., December 1991-April 1992)
5. Revised Emission Summary Tables (Sierra Research, Inc., December 1991-April 1992)
6. Construction Emissions and Suggested Mitigation Measures (Sierra Research, Inc., December 1991)
7. Atmospheric Data Collected On Site (Sierra Research, Inc., 1990-1991)
8. Air Dispersion Modeling for Project (Sierra Research, Inc., April 1992)
9. Level 2 Health Risk Assessment (Sierra Research, Inc., April 1992)
10. Tables and Figures with Data Related to Reduced Truck Traffic Project Modification (Sierra Research, Inc., April 1992)
11. EPA Decision Letter Regarding Applicability of PSD Review (EPA, April 1992)

N. Biological Assessment

Executive Summary

Mine Reclamation Corporation (MRC) proposes to develop a Class III nonhazardous solid waste landfill in an unused iron ore open pit mine at Eagle Mountain in northeastern Riverside County, California. The landfill at peak operations would receive up to 20,000 tons per day (tpd) of solid waste: 18,000 tpd by rail and 2,000 tpd by truck. The project is the construction of the landfill and access improvements, and operation of the landfill including railroad and truck transport of refuse from opening to closure and post-closure monitoring.

In addition to the proposed action, several project alternatives were considered in detail in the draft environmental impact statement/environmental impact report (EIS/EIR): (1) the Reduced Landfill Operations alternative allows for the disposal of up to 16,000 tpd in a reduced landfill area. The reduced landfill area would be the same as the proposed project's area, less those areas containing the deepest portions of the East Pit. It would allow for the disposal of 14,000 tpd by rail and 2,000 tpd by truck; (2) the Proposed Action with Rail Access Only alternative would limit the project to 16,000 tpd of solid waste, delivered by rail only. It would avoid the effects attributable to the 100 truck deliveries per day; and (3) the No Project alternative would leave the project area in its present disturbed condition and avoid the potential effects of the proposed landfill. It would require continued reliance on existing or new landfills in southern California. The Bureau of Land Management's preferred alternative is the proposed action, as modified, including the mitigation described in Section II.C. of this EIS/EIR.

Description of Actions

The federal lead agency is the Bureau of Land Management (BLM), from whom approval would be required for (1) a transfer of BLM lands at the project site to Kaiser Steel Resources, Inc., in exchange for Kaiser-owned lands along the Eagle Mountain rail line, and (2) granting of a new Federal Land Policy and Management Act (FLPMA) right-of-way for access to the landfill over the entire length of the Eagle Mountain rail line, Eagle Mountain Road, and the proposed Eagle Mountain Road Extension. The state lead agency is the County of Riverside, from whom approval would be needed for a General Plan Amendment, a Zone Change, a Specific Plan for the landfill, revision of the Mine Reclamation Plan approved in 1978, and a Development Agreement. Other actions necessary to implement the project identified and covered by this EIS/EIR include:

- A solid waste facilities permit issued by the Riverside County Department of Health (the Local Enforcement Agency [LEA]) and the California Integrated Waste Management Board;

- Waste discharge requirements issued by the Colorado River Regional Water Quality Control Board (RWQCB);
- Authority to Construct and Permit to Operate the landfill gas disposal system issued by the South Coast Air Quality Management District;
- BLM consultation under Section 7 of the federal Endangered Species Act with the U.S. Fish and Wildlife Service (USFWS) for potential effects on federally listed threatened and endangered species;
- A streambed alteration agreement with the California Department of Fish and Game (CDFG) pursuant to Section 1603 of the state Fish and Game Code;
- A Management Agreement with the CDFG under the California Endangered Species Act (Section 2081 of the state Fish and Game Code);
- Compliance with Section 106 of the National Historic Preservation Act;
- Possibly, a permit from the U.S. Army Corps of Engineers under Section 404 of the federal Clean Water Act; and
- Any other permits and actions necessary to implement the landfill and rehabilitation of the existing railroad and truck road.

The landfill would receive refuse from a number of off-site solid waste processing and transfer stations (materials recovery facilities, or MRFs). This project includes the transport of solid waste and the transport and temporary storage of some recyclable materials from the MRFs, but not the construction and operation of the MRFs themselves, which will require separate California Environmental Quality Act (CEQA) compliance.

Modifications to the Project

A draft EIS/EIR was prepared and circulated for public and agency review from July 19, 1991, to September 17, 1991. Since the draft EIS/EIR was issued, minor modifications have been incorporated in the project as a result of new regulations, responses to public comments, or other engineering considerations. These changes are nonsubstantive and do not change any of the impact conclusions of the draft EIS/EIR. They consist of changes in the landfill containment system and reduction in truck traffic to the landfill.

Changes in the Containment System. The project was originally proposed with a clay and high-density polyethylene (HDPE) liner under the deepest portions of the landfill as a part of the overall containment system. To meet the requirements of new federal regulations and

RWQCB recommendations, the proposed composite liner will underlay refuse within the entire landfill area, including side slopes. This composite liner will consist of an HDPE flexible membrane liner (FML), which is underlain by a layer of low-permeability soil or material with equivalent properties. A foundation and vadose zone monitoring layer will be placed under the composite liner. A blanket drainage system for leachate collection and removal will be placed above the composite liner, rather than the leachate collection pipes earlier proposed. A filter and a protective soil layer will be installed over the leachate collection and removal system. A landfill side slope liner is also proposed, consisting of an FML installed over a layer of low-permeability soil.

Reduction in Truck Traffic. Originally, 200 truck round trips per day were proposed during peak operations to haul refuse from several locations in San Bernardino and Riverside counties. As now proposed, the project would set a limit of 100 truck round trips per day from all sources. After three years of operation, there would be no more truck-hauling of waste from outside the desert communities relatively near the landfill, and the limit of 100 truck round trips per day would apply throughout the life of the project. Limits on truck trips would not apply in emergency interruptions of railroad operations.

Major Impacts and Mitigation

The EIS/EIR identifies major impacts on air quality, water quality, biology, and cumulative effects on water supply. Mitigation identified in the EIS/EIR would reduce impacts for these and all other issues. For air quality and cumulative effects on water supply, but for no other issues, impacts would remain significant after mitigation. Major impacts and recommended mitigation are briefly discussed below. A complete list of impacts and mitigation measures is in Section II.C. of the final EIS/EIR.

Air Quality. Air pollution emissions, even after mitigation, would still exceed most thresholds used to determine regulatory actions over point sources. Therefore, air quality effects of the project are considered a significant impact. The EIS/EIR requires the landfill operator to retain a qualified air specialist to supervise all air quality mitigation and report to trustee or regulatory agencies. Mitigation measures are consistent with the best available control technology, and include operational measures for landfill equipment with combustion engines; electrification of landfill equipment where practical; control of fugitive dust by paving, use of dust suppressants, and suspension of operations in high winds; maintenance and operating strictures for truck and locomotive engines; shutdown, maintenance, operating, and emission control procedures for heavy waste-handling equipment; and installation of a landfill gas recovery system with regulated flare or energy-recovery disposal of collected gases.

Cumulative Effect on Water Supply. Use of groundwater for the landfill, considered together with that of other users, would perpetuate an overdraft condition in the aquifer. Mitigation measures to reduce the demand for water include recycling wash water and surface water which may come in contact with refuse, but the project would still contribute to overdraft of the aquifer.

Water Quality. The major potential impact to water quality would occur if leachate or landfill gas from the landfill were to migrate into and contaminate groundwater, or if runoff were to contact refuse and subsequently contaminate surface waters. For the protection of groundwater, mitigation measures in the EIS/EIR include screening of incoming waste to eliminate hazardous materials, installation of a composite liner under all areas underlying refuse, installation of a leachate collection and disposal system, installation of a landfill gas emissions and migration control system, installation of groundwater pollution detection and monitoring wells, and installation of a vadose zone monitoring system beneath the liner. For the protection of surface water, mitigation measures include the construction of a drainage system to conduct runoff away from the landfill and all refuse-handling areas, prompt compaction and cover of refuse, and use of a low-permeability final cover and grading restrictions to reduce infiltration of precipitation into the landfill.

Biology. Construction and operation of the landfill, access roads, and railroad could adversely affect the federally endangered species desert pupfish and the federally threatened and state endangered species desert tortoise. The EIS/EIR requires the landfill operator to retain a qualified biologist to supervise all biological mitigation and report to trustee or resource agencies. For desert pupfish, mitigation would consist of reviewing plans and monitoring all construction and maintenance work in the Salt Creek drainage; avoidance of weed abatement with chemicals near the habitat; evaluation of railroad operations on the pupfish with appropriate mitigation satisfactory to USFWS and CDFG, if needed; and development of an emergency response plan to minimize impacts in case of a rail accident near the habitat. For the desert tortoise, mitigation for the potential loss of tortoises due to road and railroad traffic include monitoring tortoises near the road and railroad, relocating tortoises, and constructing barriers and passages to keep tortoises off the traveled ways. An extensive control program for ravens, coyotes, kit foxes, and other potential tortoise predators is recommended. Mitigation is also required for potential impacts to other sensitive species, including the California leaf-nosed bat, Eagle Mountain scrub jay, Alverson's foxtail cactus, Orocopia sage, and Nelson's bighorn sheep.

SECTION I

INTRODUCTION

I. Introduction

This is the final EIS/EIR for the proposed Eagle Mountain landfill project. It incorporates information contained in the addendum presented to the Riverside County Planning Commission on June 17, 1992. The federal lead agency with responsibility for the project is the Bureau of Land Management, and the state lead agency is the County of Riverside. This final EIS/EIR has been prepared pursuant to the requirements of the National Environmental Policy Act (NEPA), which apply to the federal actions, and the California Environmental Quality Act (CEQA), which apply to the state and county actions.

Volume I of this final EIS/EIR contains a description of the proposed action (Section II.A.) including modifications resulting from new legislation and public comments on the draft EIS/EIR (Section II.B.). The potential environmental impacts of the proposed action and alternatives, and mitigation measures intended to reduce impacts are summarized in Section II.G. of Volume I. Section VI of Volume I summarizes the major issues of concern raised during the public comment period, with a brief description of actions and conclusions in response to public comments. Also contained in Volume I is a detailed response to each comment letter received (Section VII).

Volume II of this final EIS/EIR contains all of the public comment letters reproduced in full with a document identification number in the upper right-hand corner of each page of the letter. Individual comments within each letter are identified by marginal numbers indicating the beginning of the specific comment. The comment letters are preceded by an index which includes the document identification number for each letter and the name of the individual or agency who produced the letter of comment.

Volume III of the final EIS/EIR contains three appendixes: (L) Updated Drainage Report; (M) Updated Air Quality Information; and (N) the Biological Assessment for BLM's Section 7 Consultation with the USFWS. It should be noted that two volumes of technical appendixes (A through K) were released with the draft EIS/EIR.

Numerous references are made throughout these documents to the draft EIS/EIR and to Volumes I and II of the Appendixes. These documents were previously circulated with the draft EIS/EIR and are not being reproduced. Copies, however, are readily available for inspection at the locations identified in Section V.D. of the final EIS/EIR.

A. Background

The proposed project site is located on a portion of the Eagle Mountain open pit iron ore mine which was operated by Kaiser Steel Corporation until 1983. Three large open pits (approximately one to two miles long) were excavated during Kaiser's operations at the Eagle Mountain

Mine. These are named the Black Eagle Pit (westernmost), Central Pit, and East Pit (formerly known as the North-South Pit). The past mining activities have resulted in the creation of significant stockpiles of spoils material on the site. Mine Reclamation Corporation has leased approximately 8,300 acres of the former Eagle Mountain mine from Kaiser Steel Resources, Inc. for a period of 100 years. MRC proposes to develop approximately 4,684 acres of this property to operate a Class III nonhazardous sanitary landfill, of which 2,262 acres would contain the landfill itself. The East Pit, which is proposed for use for landfilling, is approximately two miles long in an east-west direction, 2,000 feet wide north to south, and 400 to 800 feet deep. The proposed action will involve a land exchange between BLM and Kaiser Steel Resources, Inc. and the conversion of the existing 52-mile Kaiser railroad right-of-way and Eagle Mountain Road right-of-way to new FLPMA rights-of-way. The Kaiser railroad would be reactivated to allow for rail transport to the site.

B. Purpose

The purpose and need for this project are (1) to develop new Class III waste disposal facilities needed to accommodate estimated future demand throughout southern California and (2) to provide capacity in a remote desert setting which reduces land use compatibility and landfill gas emission problems faced by existing landfills in proximity to residential and other urban uses.

A number of publications have documented the need for new refuse disposal facilities is Los Angeles, San Bernardino, Riverside, and Orange counties. This information is summarized as follows.

State Assembly Bill (AB) 939, a recently enacted statute requiring mandatory recycling for residential solid waste, is expected to reduce the severity of the disposal capacity shortfall in Los Angeles County as this program is implemented over the next few years. The goal of AB 939 is to divert 25 percent of solid waste from landfills by 1995 and 50 percent by the year 2000. Historically, successful curbside residential recycling programs have resulted in the diversion of 12-15 percent of the residential waste stream from landfills. If these results are achieved in the city of Los Angeles, for example, curbside collection may result in the diversion of 900 tpd. This savings would reduce the total waste landfilled in the city by 5 percent. Additional savings will be achieved as the City implements planned yard waste composting and other diversion programs.

The Draft Program Environmental Impact Report (DPEIR) for Los Angeles County Integrated Waste Management System (1990) characterizes three scenarios in predicting L.A. County's waste generation and diversion rates. In all three scenarios it is assumed that the amount of waste generated will increase at a rate of 1 percent per year due to population growth and at an additional rate of 1.5 percent due to per capita increases. The three scenarios are (1) assuming 1990 waste generation and diversion rates and current recycling levels, the County will encounter a shortfall in solid waste disposal capacity in 1991; (2) assuming AB 939 goals are met, the shortfall would be delayed until 1992; and (3) assuming maximum compliance with AB 939 and full expansion of all existing landfill sites, the shortfall would be delayed until about 2002, and would remain relatively small until about 2005. Regardless of which scenario proves most accurate, it is a virtual certainty that a serious shortfall in disposal capacity for solid waste will emerge by 2005, and perhaps much earlier.

As of 1987, the valley area of San Bernardino County (with 80 percent of the county's total population) was generating and disposing approximately 3,900 tpd of nonhazardous solid waste in five County-owned landfills. If per capita waste generation increases at the same rate as elsewhere in southern California, existing capacity may be exhausted in approximately six years. The County is evaluating the potential to expand an existing landfill and to site new facilities to meet its long-term disposal needs (Southern California Association of Governments [SCAG] 1988:1-16).

The Riverside County Waste Management Generation Study (June 14, 1991) estimates total solid waste generation in the county during fiscal year (FY) 1989-1990 at 1,861,495 tons. On a six-day-per-week basis, this means almost 6,000 tpd are landfilled in the county. The 1989 Riverside County Solid Waste Management Plan (CoSWMP) projects that waste generation will almost double between 1987 and the year 2005. This projection is based almost entirely on projected growth and a constant rate of per capita waste generation. Although projects other than Eagle Mountain could conceivably meet future demand within Riverside County, the Board of Supervisors has reserved up to 2,000 tpd in its existing agreement with the project applicant. The El Sobrante, Lamb Canyon, and Eagle Mountain landfill sites are tentatively identified as future regional disposal sites in the CoSWMP (1989:XI-40).

Of all the southern California counties, Orange County has the most permitted disposal capacity relative to anticipated demand. At the current waste disposal rates of approximately 12,900 to 16,100 tpd, the permitted capacity of existing landfills will last for approximately 11 years. The recent approval of a new major landfill at Bee Canyon will increase the site life of existing facilities to approximately 18 years. The County is currently attempting to site a new facility in the northern portion of the county to replace the existing Olinda Landfill. Without this new facility, however, a capacity shortage within northern Orange County may occur in 1994 when the remaining capacity at the Olinda Landfill is fully utilized.

In addition to the need for additional landfill space as outlined above, recent regulations could reduce the number of expansions of existing disposal facilities in the area thereby increasing the disposal capacity shortfall. As a result of the new Environmental Protection Agency (EPA) regulations for landfills (Subtitle D, October 9, 1991), a composite liner is required for all new municipal solid waste landfills and lateral expansions. Compliance with the new ruling will thus significantly increase costs presently incurred from owning and operating a landfill. The premature closure of numerous existing landfills is therefore possible, which would further reduce the overall refuse disposal capacity and the site life of remaining disposal facilities.

C. Actions Covered

Actions identified and covered by this EIS/EIR include:

1. Bureau of Land Management land exchange and right-of-way grant pursuant to the FLPMA. Federal lands currently within the project area are shown in the California Desert Conservation Area (CDCA) Plan as being in the following Multiple-Use Classes: Class I - Intensive, Class M - Moderate, and Unclassified. In the original CDCA Plan, nonhazardous waste disposal sites were allowed in Class I and M, but a subsequent amendment (1985/#4) prohibits use of public lands for disposal of either hazardous or nonhazardous waste (BLM 1989). Kaiser Steel Resources, Inc. has selected those public lands it wants to be transferred to private ownership. Land currently owned by Kaiser Steel Resources, Inc. will be offered in exchange for those selected lands. The land exchange will be made pursuant to FLPMA, Title II, Section 206. A Mineral Potential Evaluation will be completed, and a current fair market appraisal will be made on both the selected and offered lands. The acreages will be balanced according to these values.

2. County of Riverside General Plan Amendment, Zone Change, and Specific Plan adoption for purposes of establishing the landfill and associated uses. The Mine Reclamation Plan approved in 1978 must be revised and a Development Agreement approved.

3. Subsequent permits and actions necessary to implement the landfill and rehabilitate the existing railroad and truck road, including a solid waste facilities permit to be issued by the Riverside County Department of Health (the Local Enforcement Agency) and the California Integrated Waste Management Board, waste discharge requirements to be issued by the Colorado River Regional Water Quality Control Board, and Authority to Construct and Permit to Operate for the landfill gas disposal system to be granted by the South Coast Air Quality Management District.

4. Consultation with the U.S. Fish and Wildlife Service is required by Section 7 of the Endangered Species Act, because the proposed land exchange and resumption of intensive use of railroad operation could affect populations of the federally endangered desert pupfish and the federally threatened desert tortoise. The Biological Assessment was transmitted to the USFWS on April 21, 1992. The biological opinion issued by the USFWS may result in changes to the proposed action and the incorporation of terms and conditions to protect the threatened and endangered species. The final results of the consultation will be included in the BLM Record of Decision.

5. An agreement (pursuant to Section 1603 of the California Fish and Game Code) with the California Department of Fish and Game for the alteration of any streambed. Also, a Memorandum of Understanding under the California Endangered Species Act, California Fish and Game Code Section 2081.

6. Compliance with Section 106 of the National Historic Preservation Act.

7. A Section 404 permit from the U.S. Army Corps of Engineers.

8. A Section 401 permit from the State Water Resources Control Board.

9. Written approval of the MWD wherever the proposed project's improvements cross an MWD right-of-way.

D. Actions Not Covered

Several related discretionary actions are identified but not covered by this draft EIS/EIR. They include:

1. County of Riverside General Plan Amendment, Zone Change, and Specific Plan adoption for purposes of establishing the townsite of Eagle Mountain and its associated activities would be required.

2. Operation of the project would depend on the transfer of waste from a system of MRFs or processing and transfer stations located throughout the areas served by the landfill. Some of these exist and others would be developed in the future. Each of these stations requires its own local land use permit (a conditional use permit in most cases) and its own solid waste facilities permit. These actions associated with the off-site transfer stations are not covered by this draft EIS/EIR and will require separate CEQA compliance.

3. Limited mining activities may continue during proposed landfilling operations. These mining activities have not been assessed in this draft EIS/EIR and may require additional NEPA/CEQA environmental review and agency approval.

SECTION II

DESCRIPTION OF PROPOSED ACTION, MODIFICATIONS, AND ALTERNATIVES

II. Description of Proposed Action, Modifications, and Alternatives

A. Proposed Action

Mine Reclamation Corporation proposes to develop a Class III nonhazardous solid waste landfill which would accommodate up to 20,000 tons per day. State law and regulations (Chapter 15 of Division 3 of Title 23 of the California Code of Regulations (CCR) regulate the disposal of four types of wastes: hazardous waste, designated wastes, nonhazardous solid waste, and inert wastes. This project will accept only nonhazardous solid waste and inert wastes. As defined in Chapter 15, nonhazardous solid waste consists of garbage, trash, refuse, paper, rubbish, industrial waste, ashes, appliances, food waste, and other materials provided that such wastes do not contain wastes which must be managed as hazardous waste or wastes with soluble pollutants in concentrations that exceed clean water quality standards.

Refuse destined for landfilling at Eagle Mountain must comply with the provision of AB 939, the Recycling Bill. Such compliance means that the refuse has been subjected to an inspection program for the removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain. Therefore, several off-site solid waste processing and transfer stations (MRFs) will be necessary to serve the landfill; however, they are not part of the proposed action and are not discussed in detail in the final EIS/EIR.

The landfill site would be located in an unused iron ore open pit mine at Eagle Mountain in northeastern Riverside County, California (Figures 1 and 2). The existing mine at Eagle Mountain is located on approximately 4,684 acres, of which 3,271 acres are under public ownership. These public lands will be transferred out of federal ownership to Kaiser Steel Resources, Inc., in exchange for lands owned by Kaiser along the existing Eagle Mountain railroad. The project includes the conversion of the railroad right-of-way granted to Kaiser Steel for mining uses between Ferrum Junction on the northeast coast of the Salton Sea and Eagle Mountain. This rail line is approximately 52 miles long, 32 miles of which exist on a legislatively authorized right-of-way, and would be used to transport waste-filled containers from the Southern Pacific line at Ferrum Junction to the project site. A new rail spur, approximately two miles long, would be built from the Eagle Mountain rail line to a container handling yard located adjacent to the southeast portion of the landfill site.

During peak landfill operations, truck transport of 4,000 tons of refuse, as originally proposed, would have resulted in approximately 200 daily round trips (400 one-way trips) between several locations in Riverside and San Bernardino counties and the Eagle Mountain landfill site. In response to traffic concerns voiced by the residents of the Coachella Valley, the truck haul component of the project has been reduced by one-half. Additionally, to reach the maximum

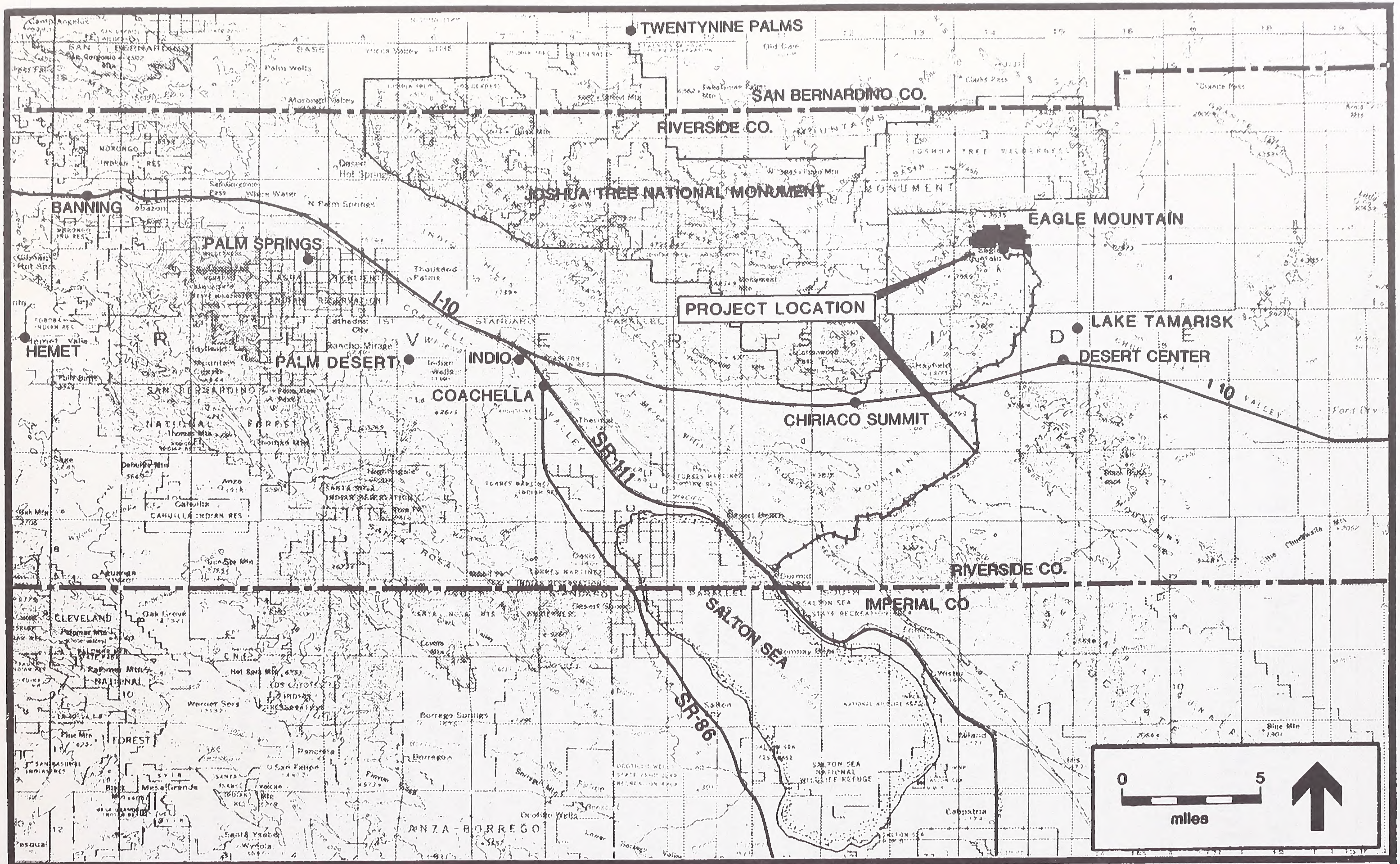


FIGURE 1. PROJECT LOCATION RELATIVE TO EASTERN RIVERSIDE COUNTY

RECON

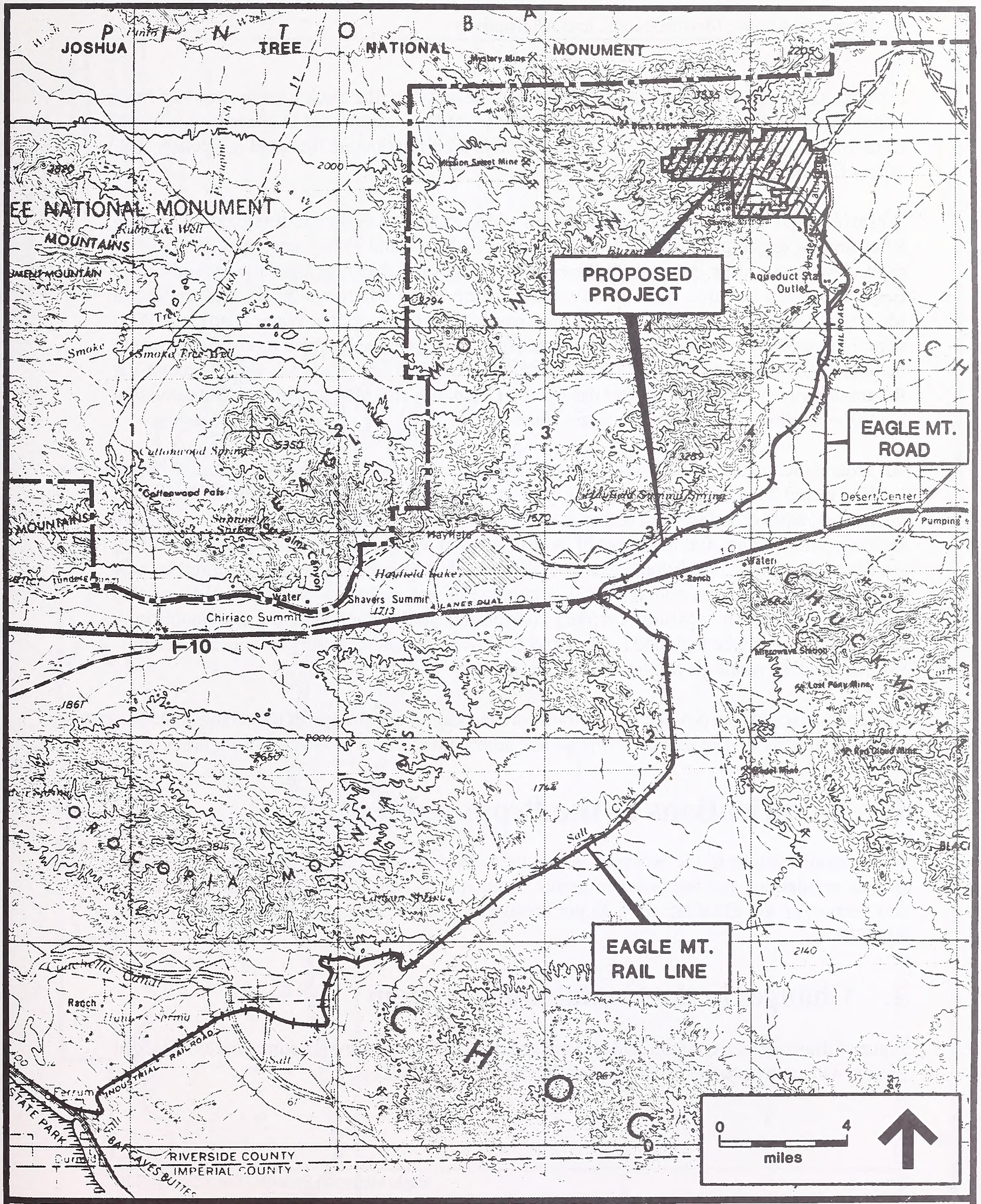


FIGURE 2. PROJECT LOCATION ON U.S.G.S. 1:250,000 SCALE MAP, SALTON SEA SHEET

capacity allowable at the landfill (20,000 tpd) while reducing the truck trips by one-half from 4,000 tpd to 2,000 tpd, the amount of refuse transported via train would increase by 2,000 tpd, from 16,000 tpd to 18,000 tpd. The details of this modification are included in Section II.B. of this EIS/EIR.

Waste received by truck would access the site via an extension of the existing Eagle Mountain Road and an existing on-site haul road. A new Federal Land Policy and Management Act right-of-way would be issued over the entire length of the existing, legislatively authorized Eagle Mountain rail line right-of-way, the existing Eagle Mountain Road, and the Eagle Mountain Road Extension, which begins just south of the Metropolitan Water District (MWD) pumping station. The existing Kaiser Truck Trail legislatively authorized right-of-way would be abandoned. Additionally, the Eagle Mountain Landfill Specific Plan would amend the Riverside County General Plan and the Zoning Ordinance and Map to facilitate initiation of a landfill operation at the Eagle Mountain Mine site.

All federal, state, and county standards regarding design, construction, and operation of the landfill would be incorporated into the project. These include requirements for lining the bottom and sides of the East Pit before placing refuse and for installing systems for collection, recovery, monitoring, and treatment of landfill gas and leachate that may be produced during the life of the project. Additional details of the proposed containment system required by new federal EPA regulations and RWQCB requirements are included in Section II.B. of this EIS/EIR. Mitigation measures for dust control and many other planning and monitoring requirements would be included in the project. Closure procedures and post-closure monitoring and funding would be provided by the project.

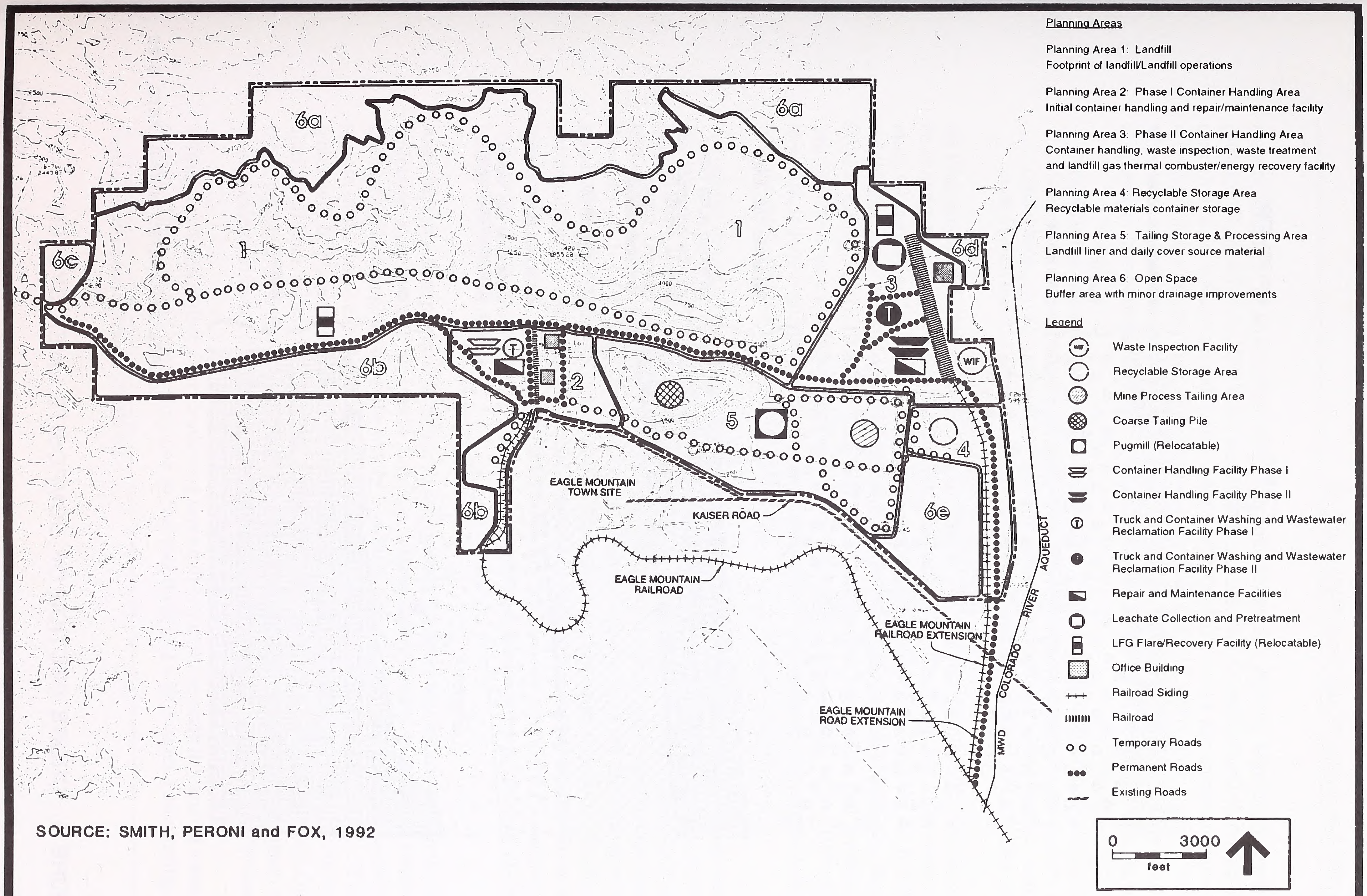
The project would also provide for the transport and temporary storage of recyclable materials collected at MRFs. The landfill footprint and adjacent land uses are shown in Figure 3.

B. Modifications to the Proposed Action

Minor modifications to the proposed action have been incorporated in the project as a result of new regulations and responses to public comments. These modifications are included in this section of the EIS/EIR; they do not change any of the impact conclusions of the draft EIS/EIR.

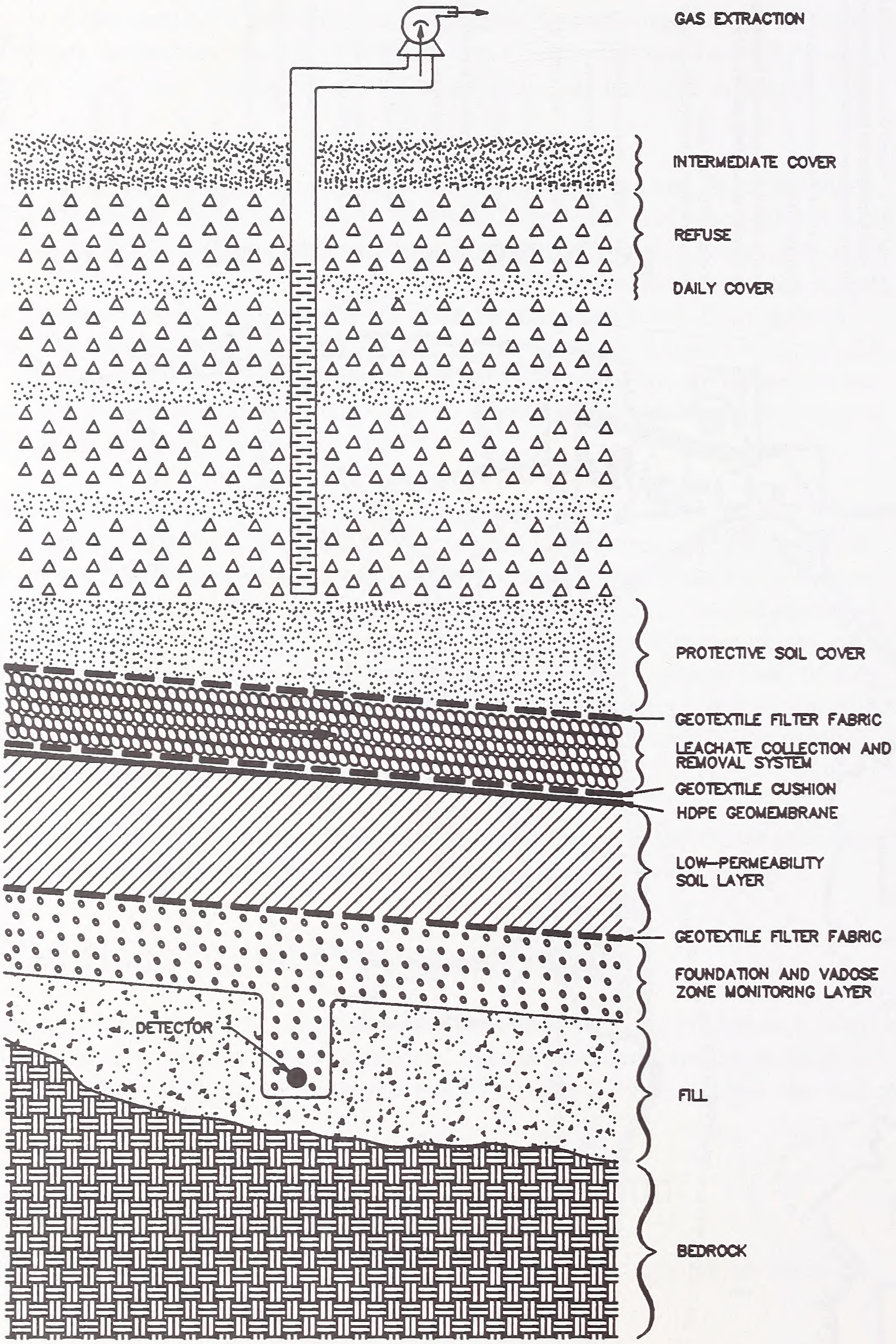
1. Changes in the Containment System

Figure 4 illustrates the containment system, and the following discussion summarizes its salient points, with an emphasis on design modifications on the projects.


Planning Areas
Planning Area 1: Landfill
Footprint of landfill/Landfill operations
Planning Area 2: Phase I Container Handling Area
Initial container handling and repair/maintenance facility
Planning Area 3: Phase II Container Handling Area
Container handling, waste inspection, waste treatment and landfill gas thermal combuster/energy recovery facility
Planning Area 4: Recyclable Storage Area
Recyclable materials container storage
Planning Area 5: Tailing Storage & Processing Area
Landfill liner and daily cover source material
Planning Area 6: Open Space
Buffer area with minor drainage improvements
Legend
Waste Inspection Facility
Recyclable Storage Area
Mine Process Tailing Area
Coarse Tailing Pile
Pugmill (Relocatable)
Container Handling Facility Phase I
Container Handling Facility Phase II
Truck and Container Washing and Wastewater Reclamation Facility Phase I
Truck and Container Washing and Wastewater Reclamation Facility Phase II
Repair and Maintenance Facilities
Leachate Collection and Pretreatment
LFG Flare/Recovery Facility (Relocatable)
Office Building
Railroad Siding
Railroad
Temporary Roads
Permanent Roads
Existing Roads
0
3000
feet
6a
6a
1
1
6c
6d
3
WIF
6b
2
5
4
6b
6e
EAGLE MOUNTAIN TOWN SITE
KAISER ROAD
EAGLE MOUNTAIN RAILROAD
EAGLE MOUNTAIN RAILROAD EXTENSION
EAGLE MOUNTAIN ROAD EXTENSION
COLORADO RIVER AQUEDUCT
MWD

SOURCE: SMITH, PERONI and FOX, 1992

FIGURE 3. PROPOSED LANDFILL SPECIFIC PLAN AREA



SOURCE: GEOSYNTEC CONSULTANTS, 5/92

FIGURE 4. CROSS SECTION OF COMPOSITE LINER SYSTEM

As a requirement of new federal Environmental Protection Agency regulations for landfills (Subtitle D, October 9, 1991) and Regional Water Quality Control Board recommendations (see Comment 0002-4), a composite liner will be installed over the entire area underlying refuse, not just some portions as discussed in the draft EIS/EIR. This liner system will include a high density polyethylene liner, also referred to as a flexible membrane liner, placed on top of a layer of low-permeability soil. Material suitable for use as a liner is described as follows:

> Earthen materials used in containment structures . . . shall consist of a mixture of clay and/or other suitable fine-grained soils which have the following characteristics, and which, in combination, can be compacted to attain the required permeability when installed. Liners made of such material are referred to as "clay liners" in this subchapter (23 CCR 2541(d)).

As discussed in the draft EIS/EIR (pages 59 and 320), this low-permeability soil layer could be constructed using compacted fine tailing material available on the site. Bentonite or other material may be added to decrease natural permeability (Appendix C of the draft EIS/EIR). Additional detail describing the installation and testing of the liner is provided in Responses 0001-4 through 0001-10 of the final EIS/EIR. Current state regulations call for this type of soil liner to have a minimum thickness of one foot and a permeability of 1×10^{-6} cm/sec or less. The federal regulations call for a permeability of 1×10^{-7} cm/sec. The project will comply with the most stringent applicable regulations.

A possible option to the use of the compacted fine tailing material for the low-permeability soil layer would be to substitute a manufactured geosynthetic clay liner in some portions of the landfill. A geosynthetic clay liner is typically constructed of bentonite sandwiched between two sheets of geosynthetic fabric. The permeability of a typical geosynthetic clay liner is on the order of 1×10^{-9} cm/sec, or about 1,000 times less (better) than the state performance standard and 100 times less (better) than the federal performance standard. Besides lower permeability, this approach would also result in lower fugitive dust emissions and less water use for dust control. Whether a low-permeability soil liner is comprised of compacted fine tailings materials or geosynthetic clay liner, a composite liner represents the state-of-the-art in landfill liner system design.

Also, in response to public comments, an engineering decision was made to design the leachate collection system using a blanket drainage system, rather than a series of interconnecting leachate collection pipes operating under a gravity system in the higher elevations and a pump system in the lower elevations as discussed in Section IV.F. of the draft EIS/EIR. The FML, which will be placed between the leachate collection and removal system and the low-permeability soil liner, will have a nominal thickness of 60- to 80-mil. A protective geotextile filter fabric will be placed above the FML to provide protection for the FML from the drain rock, or its equivalent, to be used in the leachate collection and removal system (LCRS) blanket drain.

A foundation and vadose zone monitoring layer will be placed beneath the landfill containment system. The layer will range from one to five feet thick and will contain a monitoring system to monitor the unsaturated zone beneath the landfill containment system. To protect the foundation and monitoring layer from infiltration of fine particles from the low-permeability soil liner, a foundation geotextile filter fabric acting as a separator will be placed between the upper surface of the foundation and monitoring layer and the overlying low-permeability soil layer.

Although no leachate is predicted to be generated at the Eagle Mountain landfill, the site will be provided with a leachate collection and removal system. The LCRS will include a layer of drainage material, or its equivalent, placed above the FML. The LCRS layer will be placed on a protective geotextile filter fabric. A second geotextile filter fabric will be placed over the upper surface of the LCRS blanket drain to control infiltration of fines from the protective soil cover above the LCRS material. The protective soil cover will maintain separation between the refuse and the LCRS liner system. The protective soil cover will be designed to avoid damage to the underlying drainage system and liner during construction and during initial lifts of refuse filling. The side slope liner will also consist of a low-permeability soil liner having a permeability of 1×10^{-7} cm/sec or less and a 60- to 80-mil FML.

2. Reduction in Truck Traffic

During peak landfill operations, truck transport of 4,000 tons of refuse, as originally proposed, would have resulted in approximately 200 daily round trips (400 one-way trips) between several locations in Riverside and San Bernardino counties and the Eagle Mountain landfill site. The "truck haul" component of the project has been reduced by one-half in response to comments regarding traffic concerns voiced by the residents of the Coachella Valley. The following project revisions relate to truck traffic:

a. Set a maximum daily limit of 100 on the number of trucks from all sources (this total includes trucks originating from outside and from within the desert communities). This would reduce truck trips by one-half, to a maximum of 100 round trips (200 one-way trips) per day.

b. Set a "sunset" on all trucks which originate from outside of the desert communities, beginning three years after the date on which the landfill commences operations. That is, three years after start-up of the landfill, there will be no more truck-hauling of waste from outside the desert communities.

c. Set a limit on the number of trucks that may originate from within the desert communities throughout the life of the project at 100 trucks per day maximum as stipulated in item 1a., above. That is, even after the third year "sunset" on truck haul of solid wastes goes into effect, the desert communities may generate all the truck-hauling deemed necessary to serve the needs of the community, provided the total number of trucks per day does not exceed 100.

d. Set no limit on the number of trucks employed during "emergency operations" such as those resulting from activities (acts of nature, strikes, etc.) which may interrupt railroad operations.

To reach the maximum capacity allowable at the landfill (20,000 tpd) while reducing the truck trips by half from 4,000 tpd to 2,000 tpd, the amount of refuse transported via train would increase by 2,000 tpd (that is, 12 percent), from 16,000 tpd to 18,000 tpd. The analysis of the proposed action in the draft EIS/EIR assumed a maximum of six trains per day (except for air quality), with a maximum of 20,000 tpd (pp. 31, 39, 49, 50, and 85) and that "each train would carry approximately 3,500 tons of refuse (p. 50)." Therefore, all impacts, except for air quality, associated with the transport of 18,000 tpd via train (with a continued maximum of six train trips per day) would remain within a reasonable range of those impacts and alternatives analyzed in the draft EIS/EIR.

The air quality analysis in the draft EIS/EIR (page 75, Appendix E) assumed that up to 16,450 tons of trash per day could be hauled by 4.7 trains (3,500 tpd per 4.7 trains). An analysis of air quality impacts due to the project revision of 18,000 tons per day of trash on 4.7 trains and 2,000 tpd of trash on 100 trucks is contained in Attachment 10 of Appendix M of the final EIS/EIR. This analysis requires adding 330 tpd per 4.7 trains to the original analysis to accomplish hauling 18,000 tpd for the reduced truck modification.

The analysis in Attachment 10 of Appendix M of the final EIS/EIR discusses in detail that with mitigation the total nitrogen oxides (NOx) and carbon monoxide (CO) emissions for the reduced truck modification are approximately 3 percent higher than for the proposed project as discussed in the draft EIS/EIR. This is because the NOx and CO emission factors for rail hauling are slightly higher than for truck hauling per ton/mile (6 percent and 4 percent, respectively). In addition, the reduced truck modification results in 2,000 tons of solid waste per day being transported a longer distance than for the proposed project of the draft EIS/EIR (146 miles by rail versus 75 miles by truck). Therefore, the combination of higher NOx and CO emission factors for rail hauling and a longer hauling distance for the 2,000 tons of waste per day results in higher NOx and CO emissions for the reduced truck modification.

In contrast, total volatile organic chemicals (VOC), sulfur dioxide (SO_2), and 10-micron particulate matter (PM10) emissions for the reduced truck modification are lower than for the proposed project in the draft EIS/EIR. This is because the VOC, SO_2, and PM10 emission factors for rail hauling are significantly lower than for truck hauling per ton/mile (45, 80, and 35 percent, respectively). As a result, even with a longer haul distance for 2,000 tons of solid waste per day, the reduced truck modification has lower overall VOC (1.5 percent), SO_2 (0.6 percent), and PM10 (1.9 percent) emissions than the proposed project in the draft EIS/EIR.

The VOC, SO_2, and PM10 emission decreases associated with the modified project would, therefore, result in a slight reduction in air quality impacts, while the increases in NOx and CO emissions represent a slight worsening of impacts. Mitigation measures developed through the environmental review process are not influenced by these slight changes. The draft EIS/EIR's conclusion that air quality impacts would be significant, even with mitigation, would remain valid.

In light of the above, the project modification to decrease truck tonnage and increase rail tonnage, which is proposed in response to public comments, does not constitute a substantial change in the 20,000 tpd project described and analyzed in the draft EIS/EIR.

C. Mitigation Reporting/Monitoring Program

1. Introduction

Under both federal and state environmental law, a mitigation monitoring and reporting program is required for any approved project for which an EIS or EIR is prepared. The lead agencies for preparation of the environmental document are responsible for developing and implementing the program. For this project, the lead agency under NEPA is the federal Bureau of Land Management, and the lead agency under CEQA is the County of Riverside. For both federal and state projects, the mitigation monitoring and reporting program requires a procedure or mechanism for assuring that all mitigation specified in the environmental document and required by the terms of project approval is accomplished as specified, and that the lead agency is informed of its accomplishment. For BLM, the requirement is discussed in Chapter VI of the National Environmental Policy Handbook (BLM Handbook H-1790-1); for the County of Riverside, the statutory requirement is Section 21081.6 of the California Public Resources Code (CEQA).

From a regulatory perspective, the Eagle Mountain landfill project is complex, with a number of agencies, each having jurisdiction over certain kinds of resources, involved in the approval and permitting process. These agencies often have regulatory oversight, enforcement, and reporting requirements that correspond closely to the monitoring and reporting of mitigation required by NEPA and CEQA.

2. How to Use the Mitigation Reporting/Monitoring Program

The program has been designed to include all mitigation recommended in the final EIS/EIR, arranged by the issues as they are discussed in the document—water quality, public health and safety, and so on. Because there are no significant impacts identified in the two issues of growth inducement and socioeconomics and of cultural resources, there is no mitigation required and, hence, neither section is identified in this program. Codes, abbreviations, and acronyms used in the program are identified at the end of this discussion.

The first column lists each potentially significant environmental effect identified in the EIS/EIR, and for each effect, the second column lists corresponding mitigation measures. If adopted by the lead agencies in approving the project, these measures will become legal requirements for inclusion in the project. In most cases, they would be stated as conditions or obligations of the applicant in some project-specific document or permit, or would be required by some more generally applied regulation. The third column identifies the applicable document, permit, or regulation.

The heading "Checkpoint" is intended to identify the place in the activity under consideration where the monitoring or reporting of mitigation will occur, and by a coded entry, the action (such as a field check or report) of the mitigation and reporting program that would occur at that point. "Monitor Period" indicates the phase or stage of the project in which monitoring will occur. The overall project includes operation of the landfill itself and a number of related and off-site activities. The coded entry in the Monitor Period column indicates whether the entry applies to the landfill itself, or the particular other activity indicated in the statements of effect and mitigation. "Report Frequency" lists whether reporting is intended to be done once, at regular periods, or when triggered by an event.

As already noted, one or several agencies responsible for particular resources or services may have an obligation or interest in the accomplishment of mitigation. In some cases, more than one agency may have responsibility for tracking a given measure. These agencies are entered in the program's next-to-the-last column, and are the ones with particular interest in the accomplishment of the measure, either through the agency's special responsibility, or because the document bearing the condition is that agency's responsibility, or both. The column contains acronyms that are usually readily identifiable but are included in the code list at the beginning of the program. One acronym may need additional explanation: the Local Enforcement Agency is established by the California Code of Regulations specifically as a local agency with responsibility for tracking and enforcing the regulation of solid waste disposal. For the Eagle Mountain landfill project, the LEA is the Riverside County Department of Environmental Health. The last column in the program contains a coded entry for the sanctions to be applied in the case of noncompliance with the stated mitigation measure.

The U.S. Fish and Wildlife Service and the California Department of Fish and Game are named for most biological mitigation, with USFWS also responsible for conditions of the U.S. Endangered Species Act Section 7 permit. Since the Eagle Mountain Landfill Specific Plan No. 252 is a Riverside County planning document, the Riverside County Planning Department is named as the monitoring and reporting agency for a number of measures required in the Specific Plan. Regardless of the particular agency named in the program, however, BLM and

Riverside County have overall responsibility for enforcing all mitigation measures, including the power to seek whatever legal remedies may be necessary for noncompliance.

3. Citizen's Oversight Committee

As a means of providing a forum for citizens to review the operation of the landfill, the County of Riverside will establish a project oversight committee as a condition of approval for the Specific Plan. The general functions and possible composition of this oversight committee are outlined below.

a. Purposes

- To review and report on the effectiveness of mitigation and regulatory measures that have been mandated by the various responsible public agencies.
- To assure that state and local regulatory agencies are fully apprised of local concerns.
- To provide an easily accessible public forum for community concerns.
- To provide reports to the regulatory agencies and the media regarding the status of the project and the mitigation measures.

b. Membership

Appointments:

- Four members appointed by the Board of Supervisors, at least two of whom must reside in the Eagle Mountain/Lake Tamarisk/Desert Center area and at least one of whom shall be a member of a recognized environmental group.
- Two members appointed by Coachella Valley Association of Governments.
- One member appointed by the Western Riverside County of Governments.
- One member appointed by MRC (ex officio).

Procedures for Appointment: Appointing agencies shall publicly advertise for citizens interested in filling vacant positions on the committee and shall not appoint members of the appointing agency or its staff.

c. Rules of Procedure

- At its first committee meeting, all members shall draw lots to establish staggered terms for board members. Four members of the first committee shall serve terms for four years, and three members of the first committee shall serve terms of three years. Thereafter, all members shall serve four-year terms.
- The committee shall establish its own rules of order.
- The committee shall elect its own chairperson.
- The committee shall act by consensus whenever possible.
- The committee shall meet at least quarterly, but at more frequent intervals should the conditions warrant. At least one-half of all of its meetings shall be held in the Eagle Mountain/Lake Tamarisk/Desert Center area.
- The committee may establish ad hoc committees, such as technical advisory committees, made up of persons not belonging to the committee at large to address specific issues.
- Meetings shall be open to the public, and the minutes will be filed with the County Administrator's office.
- The committee shall produce an annual report on its activities and concerns, shall file the same with the County Administrator's office, and shall make the report available to the media.

d. Mine Reclamation Corporation

- MRC will provide meeting space accessible to the public.
- MRC will provide the committee with copies of all final applications submitted to any regulatory body, copies of all permits issued by all such bodies, as well as copies of any notice or citation issued by any regulatory body alleging any violation of any law, statute, regulation, or condition of approval.
- MRC will provide the committee with copies of all written complaints received by it from any source.
- MRC will provide reasonable access to the landfill, subject only to site safety requirements.

- MRC will provide secretarial services for the taking of minutes and correspondence.

e. County of Riverside

Upon request of the committee, the Board of Supervisors shall consider special appropriations on a periodic and as-needed basis for the hiring of special experts when such expertise is not available within existing County departments, and when, in the opinion of the committee and the Board of Supervisors, the independent expertise of outside consultants is required to enable it to fulfill its purposes.

The establishment of this committee is expected to accomplish several desirable ends. First, it would enable the lead agencies to efficiently accomplish their responsibility for mitigation tracking and reporting. Second, it could act as a lead agency decision-tracking authority to assure that all mitigation, including that which is not within the responsibility of a particular resource agency, is duly accomplished. Third, it would provide a forum for all responsible agencies (including the lead agencies) to disseminate information and act in concert to discharge the responsibility for monitoring mitigation.

4. Long-Term Monitoring Team

The EIS/EIR for the proposed Eagle Mountain landfill identifies many mitigation measures for impacts to biological resources. There remains among agencies such as the National Park Service (NPS), however, a concern that long-term, subtle changes which may or may not occur in the desert ecosystem have not been adequately addressed, in part because such impacts are not predictable and in part because CEQA and NEPA tend to focus on listed or candidate species as the measure of an impact's significance. Therefore, a long-term ecosystem monitoring effort will be established.

Establishment of a monitoring team recognizes that all of the long-term, often subtle impacts of the landfill operation on adjacent desert ecosystems cannot be fully predicted. There is, then, a need to establish reliable baseline data and monitor changes over time utilizing carefully designed methodologies and research protocols to be able to identify changes in the ecosystems and the causes of those changes in a manner that also indicates the probable solutions to the identified problems. This monitoring effort, while designed to help mitigate potential, long-term impacts, also provides the positive benefit of advancing scientific understanding of desert ecosystems in a way which enhances various resource agencies' abilities to effectively manage and protect those ecosystems.

It is proposed that the monitoring team consist of three full-time field biologists (one from NPS and BLM and a lead biologist or team leader from USFWS) functioning as an interdisciplinary team with additional seasonal assistance. The monitoring team would be overseen by a Monitoring and Research Methodology Oversight Committee composed of academic experts who would serve as volunteers, reimbursed only for travel expenses. The committee would fulfill three primary functions: (1) developing research protocols and methodologies, (2) reviewing and approving the monitoring team's annual work plan and its annual report, and (3) providing expertise and access to other experts for the monitoring team. The basic purpose of the monitoring team is as follows:

The monitoring team would implement monitoring and complete inventories of animals and vegetation on the BLM and Monument lands adjacent to the proposed landfill. All components of natural systems would be considered including species not already protected by listed status. The team would look at biodiversity, present distributions of organisms, and use geographic information system (GIS), satellite imagery, or other remote sensing tools for mapping. Monitoring protocols and guidelines would be developed by a technical advisory committee in cooperation with university experts such as those already included in the NPS's Cooperative Park Studies Units (CPSUs). These professional contacts would assure accessible advice, detailed peer review, and objective implementation of experimental designs.

The MRC staff biologist responsible for implementation of species specific mitigation measures would maintain close coordination with the monitoring team. All data and information generated by the monitoring team would be public information, readily available to the Environmental Oversight Committee, MRC, and other agencies and user groups.

5. Changes in the Mitigation Reporting/Monitoring Program

Over the course of the project, it is likely that events will occur which will lead to revisions to the Mitigation Reporting/Monitoring Program. Refinements or adjustments in specific measures which result from monitoring activities are likely. For example, monitoring along Eagle Mountain Road or the Eagle Mountain railroad may identify adjustments necessary in the installation of barriers and culverts installed to protect desert tortoise. Newer technologies may become available for groundwater protection or the reduction of air emissions. Enforcement responsibility and available sanctions for noncompliance may change over time. These, and other changes, may lead to revisions in the Mitigation Reporting/Monitoring Program. These modifications would have to be prepared and reviewed by the oversight committee, and appropriate regulatory agencies. Any changes that would constitute significant amendments to the Specific Plan or other discretionary permits associated with the project would also be subject to a new environmental review. Coordination of effort among responsible agencies is particularly important because of the number of agencies involved and because several mitigation measures apply to different issues. Compaction of trash into the landfill face and prompt cover with six inches of earth material, for instance, is listed as a mitigation measure under biology, water quality, air quality, and visual issues. It will be required under the solid waste facilities permit, for which the primary responsible agency is the Riverside County LEA.

Through the oversight committee, other responsible agencies could be assured that certain mitigation measures are being implemented without unnecessary duplication of the monitoring effort.

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

CODES - Page 1 of 1

CONDITION OF:

AC/PO	Authority to Construct/Permit to Operate
AER	Air Emissions Regulations
BP	Building Permit
EMTSP	Eagle Mountain Townsite Specific Plan
GP	Grading and Improvement Plans
MRF	Contract of landfill operator with materials recovery facility/transfer stations
MSWFP	Solid Waste Facilities Permits of material recovery facility/transfer stations
NA	Not Applicable
NPDES	National Pollutant Discharge Elimination System Permit
PP	Plot Plan
S7	Section 7 Permit (U.S. Endangered Species Act)
SP	Specific Plan
SPac	Contract of landfill operator with Southern Pacific
SWFP	Solid Waste Facilities Permit
WDR	Waste Discharge Requirements

CHECKPOINT:

i	Inspection, plan or field check
p	Payment
c	Consultation
r	Report

MONITORING PERIOD:

LA	Preconstruction of landfill
LB	Construction of landfill
LC	Operation of landfill
LD	Closure of landfill
LE	Postclosure of landfill
LF	As needed, required, or conditioned
PA	Preconstruction of particular activity
PB	Construction of particular activity
PC	Operation of particular activity
PD	Completion of particular activity
T	Throughout project

MONITOR/REPORT AGENCY:

APCD	Air Pollution Control District
ARB	Air Resources Board
CDFG	California Department of Fish and Game
CHP	California Highway Patrol
DMV	California Department of Motor Vehicles
LEA	Local Enforcement Agency
NPS	National Park Service
RCBS	Riverside County Board of Supervisors
RCDB&S	Riverside County Department of Building and Safety
RCDEH	Riverside County Department of Environmental Health
RDFD	Riverside County Fire Department
RCFCD	Riverside County Flood Control District
RCPD	Riverside County Planning Department
RCTD	Riverside County Transportation Department
RWQCB	Regional Water Quality Control Board
SBCM	San Bernardino County Museum
SCAQMD	South Coast Air Quality Management District
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

REPORT FREQUENCY:

a	Once on completion
al	On completion, each event
b	On violation
c	As required, needed, or conditioned
d	Specified period
e	At discretion of regulator

SANCTIONS:

1	Withhold permit, certificate, or authority to proceed
2	Stop work order, violation notice, cease and desist order
3	Monetary

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
A. WATER QUALITY AND USE - Page 1 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential for pollution of groundwater due to migration of leachate or landfill gas.	a. The acceptance of hazardous waste is prohibited at this landfill. Leachate-causing material, such as free liquid and high-moisture waste, and hazardous waste material will be diverted from the landfill through a waste inspection program, established both at the landfill and at all waste processing facilities sending waste to this landfill, in order to minimize the pollution potential of these materials. All waste loads shall be screened at the respective facilities by trained personnel. Incoming waste will also be periodically checked by specialists with RCDEH. Identified hazardous waste will be collected, temporarily stored on-site in a special containment area provided by the operator for a period not to exceed 90 days, and later transported and disposed in accordance with State and Federal regulations. All hazarous materials waste inspection programs shall be approved by the RCDEH and will be subject to periodic inspection to determine compliance. Costs associated with these activities shall be borne by the operator.	SWFP,MRF, PP	i			i		LC,PC	c	LEA, RCDEH, RWQCB	2
	b. A composite liner, composed of a high-density polyethylene (HDPE) flexible geomembrane a minimum thickness of 80 mil., or other technologically-superior liner, placed over two (2) feet of soil with a maximum permeability of 10^{-7} cm/sec shall be installed below all refuse deposits and including side slopes. A protective geotextile filter fabric shall be placed above the flexible geomembrane liner.	SWFP,WDR PP	i	i	i			LB,PC	c	LEA,RCDEH RWQCB	1,2
	c. A leachate collection and removal system will be installed above the bottom liner using a blanket drainage system and protected by an additional layer of geotextile fabric and a minimum of two feet of compacted soil cover to allow removal of any accumulated leachate from the landfill.	WDR,SWFP, PP	i	i	i			LB,PB	c	LEA, RCDEH, RWQCB	1,2
	d. A drainage control system will be designed and constructed to divert surface water flow from adjacent areas around the landfill area to prevent run-on to the landfill.	WDR,SWFP, PP	i	i	i			LA,LB,LC	c	LEA, RCDEH, RWQCB	1,2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
A. WATER QUALITY AND USE - Page 2 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	e. Final landfill cover shall be constructed in accordance with EPA, Subtitle D, RCRA Regulations and shall consist of a minimum two-foot-thick compacted soil foundation layer, a minimum 18-inch-thick soil layer with a maximum permeability of 1 x 10^7 cm/sec, and a minimum one-foot-thick vegetative (erosion) cover or design which is agreed to be technologically superior. The final grade shall have a minimum three percent slope.	SWFP,WDR, PP	i	i	i			LD,LE	al	LEA, RCDEH, RWQCB	1,2
	f. A minimum 12-inch-thick compacted intermediate soil cover designed to minimize the percolation of rain water into refuse shall be installed over landfill areas expected to remain inactive for more than six (6) months after refuse placements.	SWFP,WDR, PP		i	i	i		LC	c	LEA, RCDEH, RWQCB	2
	g. A landfill gas emissions and migration control system shall be installed to control all gas emissions.	SWFP,WDR, AC/PO,PP	i	i	i			LC	c	LEA, RCDEH, RWQCB, SCAQMD	1,2
	h. The foundation and vadose zone monitoring layer shall be placed a minimum of 50 feet above the highest historically known groundwater level. Landfilling operations shall be phased to avoid disposal in the deepest part of the East Pit for a minimum of 25 years after the start of landfilling operations, in order to record potential future higher groundwater levels. Prior to approval of landfilling within the east end of the East Pit (Planning Area No. 1b), a further environmental assessent must be performed, which includes submission of slope stablility analysis and at a minimum, ground water investigations demonstrating the feasiblity of the proposal in this area.	WDR,SWFP, PP	i	i				LB	al	LEA, RCDEH, RWQCB	1,2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

A. WATER QUALITY AND USE - Page 3 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	The operator should anticipate that prior to landfilling the East Pit, the bottom elevation shall be raised by filling with overburden or coarse tailing material to a level of at least 50 feet above the highest recorded ponding level. Waste shall not be deposited within Planning Area No. 1b without review by the Planning Commission and approved by the County Board of Supervisors. A permit revision from the LEA will be required for an expansion into the east end of the east pit.										
	i. A system of groundwater detection and monitoring wells consisting of at least six (6) down gradient wells and one (1) up gradient well shall be installed prior to initial landfill operations and monitored near the landfill margin and down gradient, in accordance with state and federal regulatory requirements.	WDR,SWFP, PP	i	i				LB,LC	d,e	LEA, RCDEH, RWQCB	2
	j. A foundation and vadose zone monitoring layer a minimum of three feet thick containing a lysimeter monitoring system will be installed to monitor the unsaturated zone beneath the landfill containment system.	WDR,SWFP, PP	i	i	i			LB,LC	d,e	LEA, RCDEH, RWQCB	2
2. Potential for windblown litter to pollute surface waters off-site.	a. Container-transported waste will be compacted to minimize the escape of refuse.	SWFP,MRF				i		LC,PC	e	LEA, RCDEH, RWQCB	2
	b. Closed containers will be used to transport waste to the working face of the landfill.	SWFP				i		LC,PC	e	LEA, RCDEH	2
	c. Waste will be compacted into the working face of the landfill as soon as practicable and covered promptly.	SWFP					i	LC	e	LEA, RCDEH	2
	d. A minimum of six inches of compacted soil shall be used to cover refuse cells as it is placed and will completely cover refuse at the end of each working day.	SWFP					i	LC	e	LEA, RCDEH	2
	e. A daily litter pickup and disposal program shall be implemented at the landfill area and in adjacent off-site areas.	SWFP,SP	i				i	LC	e	LEA, RCDEH, RCPD	2
	f. Litter control fencing will be installed around all landfill and waste-handling areas. A standard of zero escape of litter from the permitted landfill area shall be established.	SWFP,SP,PP	i	i			i	LB,LC	e	LEA, RCDEH, RCPD	1,2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

A. WATER QUALITY AND USE - Page 4 of 5

Potential Significant Environmental Effects.	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	g. Measures to control fugitive dust shall be implemented, that may include, but are not limited to, paving of haul roads, water or chemical treatment of dirt roads, duststorm watch, and cessation of all activities when instantaneous or average wind speeds exceed limits set by AQMD rules.	SWFP, AC/PO		i			i	T	e	LEA, RCDEH, APCD	2
	h. Truck and container wash water will be treated to remove pollutants and the water shall be recycled.	SWFP, WDR,NPDES	i	i			i	T	e	LEA, RCDEH, RWQCB	2
	i. A drainage control system will be installed to divert surface flows from the landfill area away from ponded water in the East Pit.	SWFP,WDR, NPDES,PP	i	i			i	LB,LC	e	LEA, RCDEH, RWQCB, RCFCD, RCDB&S	2
3. Potential for storm water to come into contact with refuse and pollute groundwater surface waters, including the Colorado River Aqueduct.	a. Storm water from refuse disposal and handling areas will be collected and sent to on-site detention and evaporation basins or, if storm water has contacted refuse, it will be treated as leachate.	SWFP,WDR, NPDES,PP	i	i			i	LA,LB,LC	e	LEA, RCDEH, RWQCB, RCFCD, RCDB&S	2
4. Wastewater collected at the landfill site and treated at the existing Eagle Mountain treatment plant could contaminate treatment plant discharge.	a. Incoming wastewater and washwater at the treatment plant shall be pretreated to remove oils, greases, and organics, to lower biological oxygen demand.	SWFP,WDR, NPDES	i	i			i	LC	e	LEA, RCDEH, RWQCB	2
5. Potential for runoff on completed landfill to permeate landfill mass and produce leachate.	a. A low-permeability final cover, as specified in Mitigation Measure A.1.e., shall be placed on completed side slopes with gradients no steeper than three to one and on the top of the landfill with gradients no less than three percent.	SWFP,WDR	i	i				LD	a	LEA, RCDEH, RWQCB	2
	b. The top layer of the final cover will consist of vegetative soil to assure revegetation for erosion resistance.	SWFP,WDR	i	i				LD	a	LEA, RCDEH, RWQCB	2
	c. A system of groundwater extraction and monitoring wells shall be installed, in accordance with Riverside County Ordinance No. 682, and EPA, Subtitle D, RCRA Regulations and/or Article 5, Chapter 15, of the California Water Code.	SWFP,WDR	i	i			i	T	e	LEA, RCDEH, RWQCB	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
A. WATER QUALITY AND USE - Page 5 of 5

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
6. Potential for water quality degradation from the landfill after its closure.	a. Groundwater monitoring, and any corrective actions on groundwater contamination, gas collection and control, and maintenance of landscaping and drainage shall be continued for 30 years, or as additionally required by State or Federal regulations after final closure, with a certified availability of funds for the above postclosure activities defined prior to initiation of each discreet landfill unit.	SWFP, AC/PO, WDR	i	i			i	LE	e	LEA, RCDEH, RWQCB, APCD	2
7. Potential for ground water overdraft.	a. The applicant shall install low-volume toilets, faucets, and shower heads in all future buildings, and retrofit all existing toilets, faucets and shower heads in all buildings within the project boundary.	SP	i	i				T	e	RCDB&S	1
	b. The applicant shall prepare a ground water overdraft status report on the Chuckwalla Basin every 5 years and submit the report to the County Board of Supervisors, summarizing ground water trends and revealing new and ongoing measures to minimize the impact.	SP	i			r		T	d	RCBS	2
	c. Truck and container wash water will be treated to remove pollutants and the water shall be recycled. (see A.2.h.)	SWFP,WDR, NPDES	i	i			i	T	e	LEA, RCDEH, RWQCB	2
	d. Landfill liner construction during evening hours in the summer months shall be encouraged to minimize moisture evaporation within the low-permeability clay-like soil layer.	SWFP,WDR, PP	i			i		T	a	LEA, RCDEH, RCPD, RWQCB	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

B. PUBLIC HEALTH AND SAFETY - Page 1 of 4

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential impact to workers from exposure to household hazardous materials in the waste stream.	a. Through contracts with the landfill operator, all transfer station and material recovery facility (MRF) operators using the landfill will be required to develop a plan of operations including a waste inspection program that allows for the safe detection and removal of hazardous waste materials.	PP,MRF, MSWFP	r				i	PA,PC	e	LEA,RCDEH	2
	b. A radioactivity detection device shall be employed at the landfill site to detect the presence of radioactive materials, which will be removed from the waste stream, stored, and transported to a safe disposal site according to applicable regulations.	SWFP,PP		i		r	i	LC	e	LEA,RCDEH	2
	c. All local waste delivered to the landfill shall be screened for the presence of hazardous materials at an on-site inspection station.	SWFP,PP		i			i	LC	e	LEA,RCDEH	2
	d. All incoming waste shall be subject to regulatory spot checks for hazardous materials.	SWFP,PP		i			i	LC	e	LEA,RCDEH	2
	e. The landfill operator shall develop and implement safety-enhanced operational proceedures that allow for the safe handling of hazardous waste by trained personnel.	SWFP,PP	r					LC	e	LEA,RCDEH	1,2
2. Potential worker safety and explosion impacts from the migration of landfill gases into work areas and enclosed spaces.	a. A landfill gas collection and removal system will be installed at the landfill, in accordance with plans and specifications approved by the SCAQMD.	SWFP, AC/PO,PP	i	i			i	LA,LC,LE	e	LEA, RCDEH, SCAQMD	1,2
	b. A composite liner including a high-density polyethylene flexible geomembrane to restrict downward and lateral movement of landfill gases will be installed on the bottom and sides of the landfill.	SWFP,PP	i	i			i	LB,LC	e	LEA, RCDEH	2
	c. All new enclosed buildings constructed in the specific plan area within one mile of the ultimate landfill footprint shall have an impermeable membrane barrier below the foundation slab.	PP,BP	i	i				PA,PB	al,e	RCPD, RCDB&S	1
	d. All new enclosed buildings in the specific plan area within one mile of the ultimate landfill footprint shall have active or passive subfloor ventilation.	PP,BP	i	i				LC,PA,PB	al,e	RCPD, RCDB&S	1

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL
& MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
B. PUBLIC HEALTH AND SAFETY - Page 2 of 4

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	e. All new enclosed buildings constructed in the specific plan area within one mile of the ultimate landfill footprint shall have special explosion-proof seals for all utility conduits entering from below grade.	PP,BP	i	i				LC,PA,PB	al,e	RCPD, RCDB&S	1
	f. All new enclosed buildings constructed in the specific plan area within one mile of the ultimate landfill footprint shall have monitoring probes in the subfloor environment to verify system effectiveness.	PP,BP	i	i				LC,PA,PB	al,e	RCPD, RCDB&S	1
	g. Permanent subsurface LFG monitoring wells or detectors/alarms shall be placed near any existing and/or new enclosed structures within one mile of the ultimate landfill footprint when directed to do so by the RCDEH. The wells will be constructed to allow monitoring to a depth of 20 feet below grade.	SP,PP, SWFP	i	i				PA,LC, LE	e	RCDB&S, LEA, RCDEH	1,2
3. Potential impacts from landfill gas migration on structures in the town of Eagle Mountain.	a. Wells to monitor soils to a depth of 20 feet will be placed on about 1,000-foot centers along the northern town perimeter.	SP,SWFP, PP,AC/PO	i	i				LC,LE, PA,PB	e	LEA, RCDED, RCPD, SCAQMD	1,2
	b. An on-site emergency response plan will be developed by the landfill operator and submitted to RCPD, LEA and RCFD. This plan will include adequate staffing and equipment.	SP	i	i				LC,LE	e	LEA, RCDEH, RCPD, RCFD	2
4. Potential for right-of-way fires along the railroad.	a. A vegetation/weed abatement program for the Eagle Mountain rail line from Ferrum Junction to the landfill site will be implemented, including regular inspection, selective thinning or removal of vegetation, and use of a ballast regulator instead of a herbicide.	S7	i			i	i	LC	e	USFWS	2
5. Potential for fires in the refuse load.	a. Incoming refuse will be screened and all burning or smoldering material will be removed or extinguished.	MRF, MSWFP, SWFP		i				PC	e	LEA,RCDEH	2
	b. Transport container waste will be compacted prior to loading to reduce air spaces capable of supporting combustion.	MRF, MSWFP		i				PC	e	LEA,RCDEH	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
B. PUBLIC HEALTH AND SAFETY - Page 3 of 4

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
6. Potential for subsurface fires at the landfill due to presence of combustible materials.	a. A landfill gas collection and control system will be installed and operated at the landfill.	SWFP, WDR, AC/PO,PP	i	i	i			LC	b	LEA, RCDEH, RWQCB, SCQAMD	1,2
	b. An emergency response plan for the landfill will be developed and implemented.	PP,SWFP			i			LB	c	RCFD,LEA, RCDEH,	1
7. Potential for surface fires at the landfill.	a. An emergency response plan for the landfill will be developed and implemented.	PP,SWFP	i		i			LB	c	RCFD,LEA, RCDEH	1
	b. The landfill operator will be required to contribute on a fair-share basis to necessary local fire service improvements.	SP	i	p				LB	e	RCFD	1,2
8. Potential increase in vectors for diseases.	a. Waste will be compacted into the working face of the landfill not more than one hour after it arrives at the working face.	SWFP,PP					i	LC	b	LEA,RCDEH	2
	b. A minimum of six inches of compacted soil shall shall be used to cover refuse cells as it is placed and shall completely cover refuse at the end of each working day.	SWFP,PP					i	LC	b	LEA,RCDEH	2
	c. The raven control program shall shall be implemented at the landfill, as described in the mitigation measures for biological impacts in this table.	S7					c,r	T	e	USFWS, CDFG	2
	d. A bird control program, in addition to the raven control program, to address other nuisance birds, ie. sea gulls, shall be implemented at the landfill site, in accordance with Title 14.	SWFP,PP	i				i	T	e	LEA, RCDEH, RCPD	1,2
9. Potential secondary impacts for waste handling workers to be exposed to small amounts of hazardous wastes at waste transfer stations and materials recovery facilities.	a. Contracts for transfers stations and materials recovery facilities to use the landfill will require inspection and screening of the waste stream, with safe-practice removal, handling, storage, and disposal of any hazardous materials.	MRF, MSWFP,PP					i	PC	e	LEA,RCDEH	2
10. Potential for exposing landfill workers to accident or harm from heavy equipment operations, noise, odors, and dust.	a. All employees will be trained in a standard set of safe operating procedures and provided a written manual.	SWFP,PP					i	PC	e	LEA,RCDEH	2
	b. On-site inspections will be conducted on a regular basis to ensure safe operating conditions.	SWFP,PP					i	PC	e	LEA,RCDEH	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL
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B. PUBLIC HEALTH AND SAFETY - Page 4 of 4

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
11. Potential for landfill workers to be exposed to LFG condensate due to accidental spills.	a. Training of workers in standard safety procedures will include the use of protective equipment, detailed job and operating descriptions, identification of safety equipment and procedures, training, and emergency response procedures and provided a written manual.	SWFP,PP					i	PC		LEA,RCDEH	2
12. Potential for workers to be exposed to landfill gas.	a. A landfill gas collection and removal system will be installed and applicable design features will be employed for landfill buildings as described earlier in this section.	SWFP,PP	i	i				LC,LD	e	LEA, RCDEH, RWQCB, SCAQMD	2
13. Potential for rail and truck accidents to spill waste.	a. Adequate staff will be maintained on-site to provide clean-up support to Southern Pacific workers and local emergency response agencies.	SP,SWFP	i			i		LC	e	LEA, RCDEH, RCPD	2
	b. Local and state emergency plans will be required by existing statutes to include appropriate responses to accidents involving transported wastes.	exist. statutes				i,r		T	c	RCPD,RCFD	2
14. Potential for delays in rail transport system due to catastrophic events or workers strikes.	a. Containers will be designed to be transported by truck as well as rail to allow alternate means of transportation to Eagle Mountain or an alternate landfill site.	SWFP,PP	i	i				LC	e	LEA,RCDEH	1
15. Potential for public safety.	a. If the transportation of vagrants to the site via rail becomes a problem, the operator shall take steps at appropriate rail terminals to prevent vagrants from boarding the train and unloading at the site. An annual report shall be provided to the Citizen Oversight Committee together with the actions taken for a period of 5 years, and as often thereafter as requested by the Committee.	SP				r		T	d	RCPD	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDTIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

C. TRAFFIC AND TRANSPORTATION - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential conflict between proposed and ongoing railroad operations.	a. Refuse trains will be scheduled with Southern Pacific on a contractual basis to prevent any conflict with ongoing rail operations.	SPac,SP	i				i	LC	a	RCPD	2
	b. Train operations will be scheduled during evening, nighttime, and early morning hours to avoid peak-hour vehicle traffic.	SPac,SP	i				i	LC	a	RCPD	2
2. Potential safety hazard at the proposed railroad crossing of Kaiser Road.	a. Flashing lights will be installed at the railroad crossing of Kaiser Road.	SP	i	i				LB	e	RCPD, RCDB&S, RCTD	1,2
	b. Train operations will be scheduled during evening, nighttime, and early morning hours to avoid peak-hour vehicle traffic.	SPac,SP	i				i	LC	a	RCPD	2
3. Degradation of street surfaces could occur due to the weight of the refuse laden trucks.	a. Maintenance of Eagle Mountain Road will be funded by County revenue generated by the propose project on a fair share basis.	SP	i			p		T	e	RCTD	1,2
4. Potential conflict of traffic at the Eagle Mountain Road Extension/Kaiser Road intersection.	a. Two-way stop signs will be installed at the new Eagle Mountain Road extension/Kaiser Road intersection.	SP	i	i				T	a	RCPD, RCDB&S	1,2
5. Concerns of Coachella Valley residents over increased traffic due to trucks hauling waste to the landfill.	a. The limit on trucks hauling waste from all sources to the landfill will be 100 roundtrips per day.	SP	i				r	LC	e,c	RCPD	1,2
	b. Three years after start-up of the landfill, there will be no truck-hauling of waste from outside the desert communities.	SP	i				r	LC	e,c	RCPD	1,2
	c. The limit on trucks hauling waste from the desert communities to the landfill will be 100 per day throughout the life of the project.	SP	i				r	LC	e,c	RCPD	1,2
	d. There will be no limit on the number of trucks employed during emergency conditions which interrupt railroad operations.	SP	i				r	LC	e,c	RCPD	1,2

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D. AIR QUALITY - Page 1 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Supervision of air quality monitoring and reporting program.	a. A qualified consulting air quality specialist approved by the County will be retained by the landfill operator to supervise all aspects of the air quality mitigation monitoring and reporting program.	SP	i			r,c	r,c	T	c	RCPD, BLM, NPS	1,2
	b. The qualified air quality specialist will periodically file a report on the status of all air quality mitigation activity with the County of Riverside and the SCAQMD.	SP	i			r		T	d	RCPD, SCAQMD, NPS	1,2
2. Emission of pollutants from equipment with internal combustion engines during site preparation and initial construction.	a. Operational measures to control emissions will be implemented, such as limiting idling time for engines and conducting regular preventative maintenance (MC-1).	SP		i			r	LB,LC	e	RCPD	2
	b. All diesel engines will use low sulfur and low aromatic fuel meeting Calif. standards for on-highway motor vehicles (MC-2).	SP		i		r		LB/LC	e	RCPD	2
	c. The feasibility of using heavy-duty diesel equipment with engines that are certified by the CARB for use in on-highway trucks will be evaluated prior to initial construction, and such equipment will be used, if feasible (MC-3).	SP		i			r	LB,LC	e	RCPD	2
	d. Turbocharger and intercooled diesel engines with retarded injection timing will be used when available (MC-4).	SP		i			r	LB,LC	e	RCPD	2
	e. An electric version of the temporary asphalt plant will be used (MC-5).	SP	i	i				LB,LC	a1	RCPD	2
	f. An electric version of the temporary concrete batch plant will be used (MC-6).	SP,AER	i	i				LB,LC	a1	RCPD	2
3. Fugitive dust emissions during site preparation and initial construction.	a. Non-toxic chemical dust suppressants and/or water will be applied to all unpaved roads and parking lot surfaces during construction operations (MC-7).	SP,AER		i				LB	e	RCPD	2
	b. All trucks using off-site paved haul roads will have covered loads or maintain a two-foot freeboard height (MC-8).	SP		i			i	LB,LC	e	RCPD	2
	c. Soil will be prewatered prior to excavation (MC-9).	SP,AER		i			i	LB	e	RCPD	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

D. AIR QUALITY - Page 2 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	d. Spray nozzles or filters will be used at all open transfer points at the temporary asphalt plant (MC-10).	AC/PO	i	i				LB,LC	e	SCAQMD	2
	e. Spray nozzles or filters will be used at all open transfer points at the temporary concrete plant (MC-11).	AC/PO	i	i				LB,LC	e	SCAQMD	3
	f. Inactive areas disturbed by construction will be compacted and chemically treated or protected with a fabric cover (MC-12).	SP,AER		i	i			LB,LC	e	SCAQMD, RCPD	2
	g. Paved haul roads used during construction will be mechanically swept to remove the buildup of loose material (MC-13).	SP,AER				i		LB,LC	e	SCAQMD, RCPD	2
	h. All excavation, grading, and soil removal operations during the construction period will comply with SQACMD Rule 403 (MC-14).	AER	i	i				LB	e	SCAQMD	2
	i. Blowsand areas adjacent to paved haul roads will be chemically stabilized (MC-15).	SP	i	i				LB	e	RCPD	2
4. Fugitive dust impacts during landfill construction and operation.	a. Two permanent PM10 monitoring stations will be installed either pursuant to provisions in SCAQMD Rule 403 or at locations chosen in consultation with NPS.	AER,SP		i	i			T	e	RCPD, SCAQMD	2
5. Truck engines and diesel locomotive exhausts will produce emissions during transport of solid waste to the landfill.	a. Waste haul trucks will comply with all applicable California motor vehicle pollution control regulations (AQ-1).	AER		i				LC	e	ARB,DMV, CHP	1,2,3
	b. Waste haul trucks will use diesel fuel which complies with all applicable California Air Resources Board (CARB) regulations for on-highway diesel motor vehicle fuel (AQ-2).	AER		i				LC	e	ARB	2,3
	c. Waste haul trucks will be subject to random checks for excessive smoke (AQ-3).	AER					i	LC	e	SCAQMD, CHP	2,3
	d. Waste haul trucks will be subject to periodic checks for excessive smoke and emissions control system tampering (AQ-4).	AER		i			i	LC	e	ARB,CHP	2,3
	e. Waste haul trucks will be low emission vehicles as defined in the CARB regulations (AQ-5)	AER		i				LC	e	SCAQMD, ARB,DMV	1,2,3

Parenthetic notation corresponds to FEIR/EIS air quality technical report list of migitation measures.

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

D. AIR QUALITY - Page 3 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	f. Diesel locomotives on the Eagle Mountain railway will be shut down when the engines are not needed for an hour or more and will receive regular preventative maintenance, in accordance with manufacturers' recommendations (AQ-6).	SP,	i	i				LC	e	RCPD SCAQMD	2
	g. Diesel locomotives on the Eagle Mountain railway shall be fueled with diesel fuel which meets the requirements of CARB for on-highway motor vehicle diesel fuel (AQ-7).	SP,AER	i	i				LC	e	RCPD, SCAQMD	2
	h. Diesel locomotive engines purchased for use on the Eagle Mountain railway shall comply with all applicable state and federal emissions control requirements (AQ-8).	AER		i				LC	al	USEPA, ARB	1,2
	i. Two feasibility studies within six months of certification of the EIR/EIS will be performed to evaluate the potential for use of selective catalytic reduction (SCR) or natural gas fuels to reduce locomotive NOx emissions to approximately 2 grams per brakehorsepower-hour at maximum rated load. Either SCR or natural gas fuel option shall be selected by the County Board of Supervisors after input and advise from SCAQMD and the landfill operator within six months of receipt of the feasibility study for final engineering and installation on one locomotive engine operating on the E.M. railway. The County's preference for the use of natural gas due to lower air emissions will be considered in this decision. The low emission locomotive demonstration program shall be operated for up to four years upon commencement of landfilling operations. A written report shall be provided by the operator to the Board of Supervisors which describes the status and the effectiveness of the demonstration program.	SP	i,r	i				LC	al	RCPD SCAQMD	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
D. AIR QUALITY - Page 4 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	Upon achievement of the demonstration program objectives and at least a fifty percent (50%) reduction in NOx emissions from uncontrolled levels, the demonstration engine shall be routinely operated with the installed low emission design. The selected low emission system shall be installed on a second diesel locomotive engine within 12 months of the completion of the demonstration phase and system installations shall continue at 12 month intervals until all E.M. railway locomotives have been equiped with the low emission control system. If the demonstration program is unsuccessful or not feasible, alternatively, the NOx emissions from the diesel locomotives used on the E.M. railway shall not exceed 6 gm/bhp-hr, or levels allowed by the CARB, whichever is more stringent (AQ-9).										
	j. A cost-effectiveness study of electrifying the Eagle Mountain railway will be conducted when landfill gas generation is sufficient to warrant the construction of an energy recovery facility at the landfill (AQ-10).	SP	i,r	i				LC	al	RCPD	2
	k. If upon completion of the initial cost effectiveness study of the electrification of the Eagle Mountain rail line, it is determined such electrification is infeasible, subsequent studies shall be prepared every 10 years thereafter. However, if, upon completion of any of the subsequent studies, it is determined that the electrification of the Eagle Mountain rail line is feasible, the applicant shall electrify said rail line within 5 years after approval of the environmental review for its installation.	SP				i		T	d	RCPD	2
6. Air pollutants will be generated by the exhausts of heavy mobile and stationary equipment used in handling solid waste and materials.	a. Engines will be shut down if equipment will be idle for 15 minutes or longer (AQ-11).	SP	i	i				LC	e	RCPD,LEA, RCDEH	1,2

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EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL
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D. AIR QUALITY - Page 5 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	b. Machines and operators will be scheduled to match the anticipated waste volumes, and the number of container haulers will be matched to the container hauling capability (AQ-11).	SP	i	i				LC	e	RCPD	2
	c. Diesel-fueled heavy mobile and stationary equipment will be maintained in accordance with the engine manufacturers recommendations (AQ-11).	SP	i	i				LC	e	RCPD	2
	d. A record will be maintained of all visual instrument checks for excessive smoke, as well as related repairs (AQ-11).	SP	i	i				LC	e	RCPD	2
	e. All diesel-fueled equipment at the site will use diesel fuel that meets the requirements of the CARB for on-highway motor vehicle diesel fuel (AQ-12).	SP	i	i				LC	e	RCPD	2
	f. The feasibility of purchasing equipment with engines certified by the CARB for use in on-highway trucks will be evaluated in implemented, if feasible (AQ-13).	SP	i	i				LC	e	RCPD	2
	g. If there are no suitable on-highway equivalent engines, turbocharged and intercooled engines for any diesel-fueled landfill equipment will be purchased and maintained with retarded injection timing (AQ-14).	SP	i	i				LC	e	RCPD	2
	h. All landfill equipment will comply with all applicable federal and state emission control standards (AQ-15).	AER	i	i				LC	e	USEPA, ARB	2
	i. Wherever available, electric versions of landfill equipment, including overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative fuel technology will be used depending on air permitting standards (AQ-16).	SP, AC/PO	i	i				LC	e	RCPD, SCAQMD	1,2

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D. AIR QUALITY - Page 6 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	j. A study covering both economic and technical aspects shall be prepared every 10 years for the potential electrification of all types of on-site mobile and stationary equipment. If it is determined that the electrification of any of the equipment is feasible, the applicant shall electrify said equipment within three (3) years.	SP				i		T	d	RCPD	2
7. Potential emissions of air pollutants due to landfill gases.	a. When the flare gas generation rate exceeds five million (5,000,000) cubic feet per day (MCFD), an analysis of the technical and economic feasibility of recovering energy from the flared landfill gas will be conducted (AQ-17).	SP,AC/PO	i	i			i	LC,LE	e	RCPD, SCAQMD, USEPA	1,2
	b. If the analysis indicates that energy recovery is feasible, energy recovery facilities shall be installed and operating before the landfill gas generation rate exceeds 10 MCFD (AQ-17).	SP,AC/PO	i	i			i	LC,LE	c	RCPD, SCAQMD, USEPA	1,2
	c. If the analysis indicates that energy recovery is not feasible and the landfill gas generation rate exceeds eight MCFD, an oxidation catalyst system will be retrofitted to the flares which is capable of achieving at least an 80 percent reduction in carbon dioxide emissions and a 50 percent reduction in non-methane hydrocarbon emissions before the landfill gas generation rate exceeds 10 MCFD (AQ-17).	AC/PO	i	i			i	LC,LE	e	SCAQMD, USEPA	1,2
	d. If an energy recovery system is not feasible and no oxidation catalyst system is commercially available before the landfill gas generation rate exceeds 10 MCFD, revised applications will be submitted to the air pollution control agencies reflecting the higher carbon monoxide and non-methane hydrocarbon emission rates from the flares (AQ-17).	AC/PO	i	i			i	LC,LE	e	SCAQMD, USEPA	1

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D. AIR QUALITY - Page 7 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	e. If an energy recovery facility is not constructed and the landfill gas generation rate exceeds 45 MCFD, a urea injection system (or equivalent) capable of achieving at least a 30 percent reduction in oxides of nitrogen emissions will be retrofitted before the landfill gas generation rate 50 MCFD (AQ-17).	AC/PO	i	i			i	LC,LE	e	SCAQMD, USEPA	1,2
8. Excessive fugitive dust from handling and transfer of solid waste and cover material.	a. Water will be applied as a dust suppressant to all unpaved road and staging area surfaces used temporarily (30 days or less) during landfill operations (AQ-18).	AER,SP	i	i			i	LC	e	RCPD, SCAQMD	2
	b. Chemical dust suppressants will be applied over a base of compacted coarse tailings on all unpaved road surfaces used more than 30 days, but periodically reconstructed or relocated (AQ-19).	AER,SP	i	i			i	LC	e	RCPD, SCAQMD	2
	c. All permanent on-site roads will be paved and periodically cleaned with mechanical sweepers (AQ-20).	AER,SP,PP	i	i	i			LC	e	RCPD, SCAQMD	2
	d. Tailing piles will be prewatered prior to excavation (AQ-21).	AER,SP	i	i			i	LC	e	RCPD, SCAQMD	2
	e. Water will be applied as a dust suppressant prior to clearing material from pit benches, excavating landfill gas collection ditches, reconstructing transitional roads, and any other operations which could result in dust emissions visible from locations outside the project boundary (AQ-22).	AER,SP	i	i			i	LC	e	RCPD, SCAQMD	2
	f. All haul trucks will pass through on-site wheel-washing stations prior to leaving the landfill.	SP	i	i			i	LC	e	RCPD, SCAQMD	2

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E. LAND USE - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Landfilling would render existing iron ore reserves unrecoverable.	a. Landfill operations will be phased to assure that the iron ore resources most feasible to mine are impacted last to allow for recovery, if economically justified.	SP,SWFP	i	i				LC	e	RCPD,LEA, RCDEH	1,2
2. Potential incompatibility with existing residential and correctional uses surrounding the landfill.	a. Landfill truck traffic will be restricted to Eagle Mountain Road and Eagle Mountain Road Extension only.	SP	i				i	T	e	RCPD,LEA, RCDEH	2
	b. All landfill structures will be set back a minimum of 25 feet from the landfill boundary.	SP,PP,BP	i	i			i	LA,PA, T,PB	e	RCPD, RCDB&S	1,2
	c. All landfill structures will be limited to a maximum height of 60 feet.	SP,PP,BP	i	i				LA,PA, T,PB	e	RCPD, RCDB&S	1,2
	d. The base of the landfill be at lease one half-mile away from the nearest residences.	SP,PP	i	i				LA,LC	e	RCPD,LEA, RCDEH	1,2
	e. The landfill will operate under a requirement to employ the "Best Available Control Technology" to control fugitive dust, including visible dust, under South Coast Air Quality Management District rules.	AC/PO	i	i			i	LA,LC, LD	e	SCAQMD	1,2
	f. The appearance of the later phases of the landfill will be designed to blend with nearby areas by revegetation and control of color, tone, and texture of the final cover.	SP	i	i				LC,LD, LE	e	RCPD	1,2
3. Inconsistency of proposed landfill operations with the existing General Plan land use designation and zoning.	a. Approval of a County of Riverside General Plan Amendment and Rezone will be required for project implementation.	Project Approval			i			LA	a	RCPD	1
4. Conflict between proposed use and the current BLM land classification.	a. Approval of a land exchange between BLM and the project proponent that would divest the BLM of reversionary interest in the project site will be required for project implementation.	Project Approval			i			LA	a	RCPD	1
5. Potential incompatibility of proposed transfer stations with existing or surrounding uses.	a. Siting of all transfer stations will require approval of local jurisdictions, including environmental review under CEQA.	*	*	*	*	*	*	*	*	*	*

*Local jurisdiction review and approval process.

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
F. SURFACE DRAINAGE/FLOODING - Page 1 of 2

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential for increased leachate and adverse effect on groundwater if storm water infiltrates the landfill.	a. A temporary drainage ditch will be constructed around the up-slope perimeter of each working area of the landfill to divert storm water flows around and away from the fill area as filling occurs.	SWFP,WDR, PP	i	i			i	LC	e	LEA, RCDEH, RWQCB	2
	b. As each area is filled, it shall be capped with a low-permeability soil cap. Capped areas will have side slopes with an average steepness of 3:1 with intervening benches. Bench drains shall be constructed to discharge surface runoff into perimeter drains north and south of the landfill.	SWFP,PP		i			i	LC	e	LEA,RCDEH	2
	c. All drainage facilities within the waste management unit will be sized to handle runoff from a storm of 100-year frequency and 3-hour duration and a 500-year frequency will be adopted for review of channel freeboard design.	SWFP, NPDES,SP, PP	i	i			i	LC	e	LEA, RCDEH, RWQCB, RCFCD	2
	d. For Stage 1 perimeter drainage, Eagle Creek will be piped under the haul road south of the landfill, the existing upper detention basin will be opened, and a channel will be constructed along the north side of the haul road to discharge into the west bowl of the East Pit.	SP,PP, NPDES	i	i			i	LB	a	RCPD, RCFCD, RWQCB	2
	e. For Stage 2 perimeter drainage, Bald Eagle Creek will be intercepted by constructing a perimeter channel on the north edge of the landfill to discharge into a natural watercourse. On the south, the Eagle Creek drainage will be extended to discharge into the east bowl of the East Pit.	SP,PP, NPDES	i	i			i	PB	a	RCPD, RCFCD, RWQCB	2
	f. For permanent, completed landfill perimeter drainage on the south, a channel and detention system will be constructed along the southern borders of Planning Area Nos. 4 and 5 and under the railroad in a box culvert to discharge into a natural streamcourse through an energy-dissipating structure designed to avoid erosive velocities at the MWD aqueduct crossing.	SP,PP, NPDES	i	i			i	PB	a	RCPD, RCFCD, RWQCB	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

F. SURFACE DRAINAGE/FLOODING - Page 2 of 2

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	g. For permanent, completed landfill perimeter drainage on the north, runoff from the northern slope of the landfill and Bald Eagle Creek will be collected in a channel and detention system to the east through an energy-dissipating structure.	SP,PP, NPDES	i	i				PB	a	RCPD, RCFCD, RWQCB	2
	h. Final landfill slope will be a minimum of three percent to promote drainage.	SWFP,PP	i	i				LD	a	LEA,RCDEH	2
	i. Final landfill cover will consist of a minimum thickness of four and one-half feet, including a minimum two-foot thick compacted soil foundation layer, a minimum 18 inch-thick low-permeability soil layer and minimum one-foot thick vegetative layer which maximizes the stability of the slope for the longest term possible, with minimum maintenance. The final cover shall include small islands of thickened vegetative layer and plantings throughout the landfill which will support local microbiologic resources. Also see A.1.e.	SWFP,PP	i	i				LD	a	LEA, RCDEH, RWQCB	2
2. Potential for contamination of runoff by storm water contact with refuse in landfill operational areas.	a. Storm waters that would enter operational areas from off-site will be intercepted and conducted into existing, modified, or constructed drainage systems discharging into natural watercourses off-site.	SWFP, WDR, NPDES	i	i			i	LC	e	LEA, RCDEH, RCFCD, RWQCB	2
	b. Runoff from landfill operational areas handling refuse will be collected and diverted into a detention facility for testing. Uncontaminated runoff will be routed into the storm channel system. Contaminated runoff will be classified as leachate and processed through a onsite treatment facility.	SWFP,WDR, NPDES	i	i				LC	e	LEA, RCDEH, RCFCD, RWQCB	2
3. Flooding, erosion, and effects on biological resources from discharge of storm waters collected from around the landfill.	a. In all cases, the drainage system will be designed to discharge into natural watercourses through energy-dissipating structures with peak flows reduced below per-mining conditions.	SP,PP, NPDES	i	i				T	e	RCDB&S, RCFCD, RWQCB	2
4. Potential for flooding in Eagle Mountain townsite as southerly flow patterns are reestablished because of diversion of storm waters around the landfill.	a. Collection, diversion, and discharge of storm waters through the landfill drainage system will eliminate the potential for flooding of the Eagle Mountain townsite due to construction of the landfill.	SP	i	i				T	e	RCFCD	1

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G. BIOLOGY - Page 1 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
A. General 1. Supervision of biological monitor and reporting program.	a. A qualified consulting biologist will be retained by the landfill operator to supervise all aspects of the biological mitigation monitoring and reporting program in cooperation with the NPS/BLM monitoring team.	SP	i			r,c	r,c	T	d	RCPD,BLM, USFWS, CDFG	1,2
	b. The consulting biologist will file annual reports on the status of all biological mitigation activity and related information for the preceding year with the County of Riverside, the BLM, the CDFG, and the NPS.	SP	i			r		T	d	RCPD,BLM, USFWS, CDFG,NPS	2
B. Desert pupfish 1. Impacts to desert pupfish populations during repair and maintenance of the rail line near the Salt Creek tributary.	a. Plans for construction or major maintenance will be reviewed by a qualified biologist and will include designs and specifications that will avoid impacts to desert pupfish, to the satisfaction of the USFWS and CDFG.	S7	i			i		PA	al	USFWS, CDFG	2
	b. Storage and staging areas will be placed in locations which will not affect the habitat, and measures to avoid any discharge of pollutants will be incorporated.	S7	i	i		i		PA,PB, PC	al	USFWS, CDFG	2
	c. Construction activities will be prohibited during the fall when pupfish populations are most restricted and vulnerable.	S7	i	i		i		T	b	USFWS, CDFG	2
	d. A qualified biologist will be retained to monitor any maintenance work conducted on or near pupfish habitat.	S7				i		T	c	USFWS, CDFG	2
2. Potential impacts to desert pupfish during weed abatement program.	a. All weed/plan removal will be done by hand. No herbicides or other chemicals will be used.	S7				i		T	b	USFWS, CDFG	2
3. Possible but unlikely impact on pupfish from train operations.	a. Data from ongoing CDFG surveys of pupfish in the Salt Creek drainage will be assessed to determine whether railroad operations are affecting pupfish.	S7					c	PA,PC	c	USFWS, CDFG	2
	b. If the assessment of data suggests impacts on pupfish, corrective actions will be developed in consultation with USFWS and CDFG.	S7					c	PC	c	USFWS, CDFG	2

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
4. Potential impacts to desert pupfish in the Salt Creek habitat area from a railroad accident.	a. In the event of an accident near pupfish habitat, a biologist will be included as a response and clean-up team member and USFWS, BLM, and CDFG will be notified immediately.	S7	i	i				PA	a	USFWS, CDFG	1
	b. Measures to restore the pupfish habitat in Salt Creek and its tributary in the event of an accident shall be incorporated as part of the response.	S7				i	c	PC	c	USFWS, CDFG	2
	c. If restocking of pupfish is required in the aftermath of an accident, the nearest suitable genetic strain of pupfish will be the source of the transplantation. Potential restocking sources shall be reported to the USFWS at 5 year intervals.	S7		i				PA,PC	c	USFWS, CDFG	2
	d. All emergency procedures will be proposed to and approved by USFWS and CDFG prior to implementation.	S7					c,r	T	c	USFWS, CDFG	2
	e. Reports of all emergency procedure results will be submitted to the USFWS and CDFG upon completion.	S7			r			PD	c	USFWS, CDFG	2
C. Desert tortoise 1. Possible direct impacts on tortoises during construction, and loss of 150 acres of tortoise habitat, from improvements and widening of Eagle Mountain Road.	a. A preconstruction survey will be conducted by a qualified biologist who will remove all tortoises within the 150-foot construction zone to a safe distance (300 feet) in the immediate vicinity.	S7				i		PA	a	USFWS, CDFG, RCDB&S	1
	b. The landfill operator will purchase 375 acres of tortoise habitat selected BLM and transfer ownership of the habitat to BLM. All compensation acreage will be within the Chuckwalla Management Area.	S7			c			PD	a	USFWS, CDFG	1
2. Possible impacts from predation on juvenile tortoises by ravens, coyotes, kit foxes, and other predators attracted to the landfill.	a. A raven monitoring program, including a minimum of two years of preoperation monitoring, will be developed and enacted in conformance with BLM methodologies. Monitoring of ravens will continue throughout the life of the landfill project or until BLM, USFWS, and CDFG determine it is no longer necessary.	S7					c,r	T	e	USFWS, CDFG	2
	b. The perimeters of all landfill and waste handling areas will be fenced with fencing designed to exclude predators such as coyotes and kit foxes.	S7,PP	i	i				T	c	RCDB&S, USFWS, CDFG	1

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Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet- tion	Per Event	Discre- tion				
	c. A minimum six-inch covering of dirt/tailings will be placed over deposited refuse on a daily basis to minimize attracting ravens to refuse.	SWFP,PP					i	LC	b	LEA,RCDEH	2
	d. A nonlethal raven control program will be conducted, including hazing at the landfill site, prompt removal of road-killed wildlife along access roads, and the possible use of bird repellant methyl anthranilate.	S7					c	LC	b	USFWS, CDFG	2
	e. If necessary, and subject to the approval of BLM, USFWS, and CDFG, a raven control program will be implemented that may include nest destruction, shooting, poisoning and alterations of landfill operations.	S7					c	LC	b	USFWS, CDFG	2
	f. A raven monitoring committee will be established to oversee the raven monitoring and control program.	S7					c	LC	b	USFWS, CDFG,NPS	2
3. Potential loss of desert tortoises during regular maintenance of rail track.	a. Prior to scheduled track maintenance, all occupied burrows within 100 feet of the track will be examined for the presence of tortoises and marked by a qualified biologist. Any burrow that collapses during repair and maintenance activities will be immediately excavated, and any tortoise found will be translocated to an artificial burrow no less than 300 feet from the original burrow site.	S7		i		i		PA	al	USFWS, CDFG	2
	b. A qualified biologist will translocate any above-ground tortoises found within the rail corridor during repair activities to an abandoned or artificial burrow no less than 300 feet from the rail line, if determined necessary.	S7		i		i		PB	al	USFWS, CDFG	2
	c. During maintenance and repair to the railroad, the storage of equipment and materials, parking of vehicles, and other staging activities will be confined to three currently disturbed sites at Ferrum, Red Cloud and Summit.	S7	i	i		i		PB	b	USFWS, CDFG	2
	d. All weed control within the right-of-way will be done by hand. No herbicides will be used.	S7	c				i	T	e	USFWS, CDFG	2

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G. BIOLOGY - Page 4 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
4. Potential impact to desert tortoise populations due to train kills of tortoises and fragmentation of habitat by operation of the Eagle Mountain Railroad.	a. Existing culverts will be cleaned out and repaired under the rail line to allow use as crossings by tortoises.	S7		i		i		LA	a	USFWS, CDFG	2
	b. At an appropriate interval before each train trip on the Eagle Mountain rail line, a qualified biologist will survey and remove tortoises on or adjacent to the railroad right-of-way. Removed tortoises will be placed off the rail line berm.	S7				i		PA	al	USFWS, CDFG	2
	c. Records will be evaluated within three years to assess optimum locations for culverts and barriers, if needed. A barrier/culvert system will be constructed at appropriately identified locations.	S7				c		PC	c	USFWS, CDFG	2
	d. Ballast will be placed between the tracks at 100-foot intervals in tortoise habitat areas to allow tortoises caught between the tracks to escape.	S7	i	i				PB	al	USFWS, CDFG	2
	e. A long-term tortoise population monitoring program utilizing sampling methods approved by the USFWS adjacent to the E.M. Railroad and Eagle Mountain Road rights-of-way will be developed to monitor changes in tortoise population as the project proceeds. This monitoring program will continue for the life of the project.	S7	c				i	T	e	USFWS, CDFG	2
5. Potential loss of desert tortoises due to road traffic.	a. Tortoise-proof barriers will be installed on both sides of Eagle Mountain Road for the first four miles north of Interstate 10.	S7	i	i				PB	a	USFWS, CDFG, RCDB&S	1,2
	b. Culverts will be installed under Eagle Mountain Road at a minimum of one per mile of road.	S7	i	i				PB	a	USFWS, CDFG, RCTD	1,2
	c. A qualified biologist will monitor Eagle Mountain Road and Kaiser Road for tortoise activity throughout the life of the project.	S7		i				T	c	USFWS, CDFG	2
	d. Biologists will survey Eagle Mountain Road on a daily basis and tortoise encountered will be moved 300 feet from the right-of-way, including tortoises reported by truck drivers and local residents.	S7		i				T	c	USFWS, CDFG	2

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	e. A speed limit of 35 miles per hour will be set and enforced along Eagle Mountain Road until barriers are in place.	SP	i	i				PA,PB	a	RCPD, RCDB&S	1
	f. A mandatory local worker and truck driver education program will be implemented prior to commencement of landfill operations, with voluntary participation by townsite residents.	SP,S7	i				r	T	c	USFWS, CDFG,RCPD	1,2
6. Potential cumulative impacts to desert tortoise regional population from habitat fragmentation and raven predation.	a. Measures described above will be implemented to mitigate potential cumulative impacts from habitat fragmentation and raven predation due to this project. Development of a desert tortoise management plan for the Joshua Tree National Monument and closure of the Desert Center landfill would also help mitigate cumulative impacts, but these measures cannot be implemented as a condition of this project. All mitigation measures implemented for this project will be altered, if necessary, to conform to the USFWS Desert Tortoise Recovery Plan .	See C.2.4. & 5. above									
7. Indirect impacts to tortoises associated with an increase in human activity including vandalism, illegal collection, and off-road-vehicle use.	a. A mandatory local worker and truck driver education program with voluntary townsite resident participation will be implemented.	See C.5.f. above									
D. California leaf-nosed bat 1. Impacts to the California leaf-nosed bat could occur due to loss of roost in the large adit location in an area to be landfilled in approximately 35 years.	a. Spring and winter monitoring surveys of bat activity at the adit will be conducted prior to commencement of landfill operations.	S7		i			r	LA	c	USFWS, CDFG	2
	b. Monitoring will be continued until the landfill reaches the area of the adit.	S7		i			r	PB,PC	c	USFWS, CDFG	2
	c. When filling reaches the adit, the mouth of the adit will be extended upward and/or outward above any landfill deposits.	S7		i		i	r	PC	a	USFWS, CDFG	2
	d. The conduit material used to extend the adit will be impermeable to landfill leachate and gas. An impermeable liner will be used if necessary.	S7		i		i		PC	a	USFWS, CDFG	2
	e. The adit entrance will be gated to allow free exit and entry of bats, but prevent human intrusion.	S7	i	i				PA,PB	a	USFWS, CDFG	2

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	f. Bat monitoring will be continued through the life of the landfill operation.	S7	i	i				PA,PB	a	USFWS, CDFG	2
E. Eagle Mountain scrub jay 1. Potential increase in regional raven population could result in raven predation of scrub jay eggs and young.	a. Raven control measures for impacts to desert tortoise will also mitigate the potential impact on the Eagle Mountain scrub jay.	See C.2.a.-e. above									
F. Alverson's foxtail cactus 1. Impacts to 125 acres of Alverson's foxtail cactus habitat within Eagle Creek Wash by construction of the landfill and to approximately 33.3 acres of habitat by the proposed Eagle Mountain Road extension and railroad spur.	a. Approximately 157.4 acres of Alverson's foxtail cactus habitat in Specific Planning Area 6E will be preserved in a conservation easement.	S7,SP,PP	i	i				LA	a	USFWS, CDFG, RCPC	1
	b. A 2 year test cactus transplantation study shall be conducted to determine the viability of relocating cacti. If the test study determines viability, a transplant program will be conducted on suitable areas within the project boundary as a research program on cactus habitat rehabilitation using transplants from impact areas.	S7.SP		i				PA	c	USFWS, CDFG, RCPD	2
G. Orocopia sage 1. Potential impacts to Orocopia sage along the Eagle Mountain Railroad right-of-way.	a. Prior to commencement of construction activities, a qualified biologist will meet with the construction supervisor to discuss avoidance and minimization of impacts.	S7,SP	i					PA	c	USFWS, CDFG, RCPD	2
	b. Specific area to be avoided will be delineated before construction by flagging or other means.	S7,SP		i				PA	c	USFWS, CDFG, RCPD	2
	c. Maintenance and construction staging areas will avoid areas containing Orocopia sage.	S7,SP	i	i				PA,PB	a	USFWS, CDFG, RCPD	2
	d. Roads adjacent to the rail line will be kept to their current width.	S7,SP	i	i				PA,PB	c	USFWS, CDFG, RCPD	2
	e. Employees will be alerted to avoid off-road travel and other disturbances in areas where sage is present.	See C.5.f. above									

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

G. BIOLOGY - Page 7 of 7

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
H. Nelson's bighorn sheep 1. Loss of three permanent and one temporary bighorn sheep watering sources.	a. A preconstruction telemetry study will be conducted to identify new locations to place permanent water sources, based on herd movements.	S7				i,r		LA	a	USFWS, CDFG	2
	b. Three new permanent water sources will be placed at sites approved by BLM and CDFG away from the mine site.	S7		i	i,r			LA,LB	a	USFWS, CDFG	2
	c. Buzzard Springs will be rehabilitated and cleared of tamarisk.	S7		i	r			LA, LB	a	USFWS, CDFG	2
	d. If necessary, sheep will be translocated to areas near the new water sources.	S7					i,c	LA,LB, LC	e	USFWS, CDFG	2
	e. New and rehabilitated water sources will be maintained through the life of the landfill and replaced if necessary.	S7		i				T	e	USFWS, CDFG	2
	f. Telemetry studies will be continued after operations begin to assess sheep use of new watering sources until USFWS and CDFG are satisfied that sheep water-source use has stabilized.	S7			r		c	LC	a	USFWS, CDFG	2
2. Loss of about 994 acres of bighorn sheep habitat due to project implementation.	a. Creation and rehabilitation of water sources will allow expansion of sheep ranges into new habitat.	See H.1.a.-f. above									
	b. Approximately 744 acres of bighorn sheep habitat on-site will be preserved in open space as usable habitat and a buffer area between the landfill and relocated sheep population.	S7,SP,PP	i				i	LA	a	USFWS, CDFG,RCPD	1,2
3. Potential impacts from increased human presence, including landfill operations, residential uses, poaching, pets, and domestic livestock.	a. Information on bighorn sheep will be incorporated in the mandatory local worker and truck driver educational program described above as mitigation for desert tortoise impacts.	See C.5.f. above									
	b. Only authorized individuals will be allowed to possess firearms on the landfill site.	S7,SP	i	i				T	e	USFWS, CDFG,RCPD	1,2,3
	c. Dogs will be prohibited on the landfill site unless they are confined or restrained.	S7,SP	i	i				T	b,e	USFWS, CDFG,RCPD	1,2,3

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

II. GEOLOGY AND MINERAL RESOURCES - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potentially expansive soils may occur in the fine tailing storage lagoons and in areas underlain by alluvial material.	a. Soils underlying the landfill footprint will be evaluated by an geotechnical engineer and/or an engineering geologist and area with expansive soils will be subject to appropriate mitigation before landfilling, such as selective or remedial grading.	SWFP	i	i				LA,LB	a	LEA,RCDEH	2
2. Instability of manufactured slopes in bedrock and alluvial areas of the East Pit.	a. As grading for the landfill occurs, a geotechnical engineer and/or engineering geologist will determine safe slope angles and maintain slopes within this range, with flattening of slopes or construction of fill buttresses as needed.	SWFP	i	i				LA,LB	c	LEA,RCDEH	2
	b. A geological engineer and/or engineering geologist will assure that the liner is placed against safe slope angles.	SWFP	i	i				LA,LB	c	LEA,RCDEH	2
3. Potential for settlement in waste rock dumps northeast of the East Pit and loose alluvium in the eastern project areas.	a. Unsuitable soils will be excavated and/or recompacted prior to liner construction in areas of potential settlement.	SWFP	i	i				LA,LB	c	LEA,RCDEH	2
4. Potential slope failure and dislodgment of loose materials from existing manufactured slopes in the strong seismic event.	a. Loose rock and materials will be progressively scaled from benches above the working face of the landfill.	SWFP	i	i				LA,LB	c	LEA,RCDEH	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDTIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

I. VISUAL, RECREATION, AND WILDERNESS RESOURCES - Page 1 of 3

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential visual contrast between the landfill and the characteristics of surrounding landscape.	a. Shape and mass of the landfill area will blend with nearby forms more than the existing graded areas, and color, tone, and texture of the final cover will be designed to reduce contrast with adjacent undisturbed area.	SP	i	i				LD	a	RCPD	2
	b. Grading and landfill limits will be clearly staked or fenced, construction access will be controlled, and ancillary activities will be confined to existing disturbed areas wherever possible to minimize additional disturbance of the native landscape.	SP,PP	i	i				T	e	RCPD, RCDB&S, LEA,RCDEH	2
	c. Final cover will include a top layer of vegetation soil containing a seed mix of native plants to encourage regrowth of native plant material.	SP	i	i				LD	e	RCPD	2
2. Potential visual impacts from Desert Center, Lake Tamarisk, Interstate 10, and State Highway 177.	a. Visual contrast between the landfill and surrounding area will be reduced as described for the preceding impact.	SP,PP	i	i				T	e	RCPD	2
	b. Operations will be phased so that natural topography, distances, and existing vegetation will screen the initial phases of landfill operations. Landforms created by the final phases and completed landfill will approximate original topographic conditions.	SP,SWFP	i	i				LC	e	RCPD	1,2
	c. Truck traffic to the container handling yard will use I-10 and Eagle Mountain Road rather than going through Desert Center on Kaiser Road past Lake Tamarisk and other residences.	SP	i				i	LC	e	RCPD, RCDB&S	1,2
3. Potential impacts of the visibility of the landfill from the townsite of Eagle Mountain.	a. The base of the landfill will be at least one half-mile away from the nearest residences.	SP	i					LA	a	RCPD	1
	b. Final cover and revegetation of the landfill mass in later phases of operation will reduce visual contrast as described for the first impact discussed in this section.	SP	i	i				LD	e	RCPD	2
4. Windblown debris and dust from landfill operations could adversely affect the visual quality of the surrounding area.	a. The perimeters of all landfill and wastehandling areas will be fenced and regularly patrolled for litter control.	SWFP,SP, PP	i	i			i	LC	e	LEA, RCDEH, RCPD	1,2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDTIONS OF APPROVAL
& MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST
I. VISUAL, RECREATION, AND WILDERNESS RESOURCES - Page 2 of 3

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
	b. Incoming refuse will be kept in closed containers until transported to the working face of the landfill. Upon deposit, the refuse will be compacted and covered on a daily basis with a minimum six-inch layer of coarse tailing.	MRF,SWFP	i	i			i	LC	e	LEA, RCDEH, RCPD	1,2
	c. A storm watch and early warning program will be implemented to alert landfill personnel to cover uncovered materials prior to a windstorm.	SP,SWFP	i	i		i		LC	e	LEA, RCDEH, RCPD	1,2
	d. A response plan to provide complete clean-up of accidental spills will be developed, including sufficient equipment and personnel to conduct a clean-up.	SP,SWFP	i	i		i		LC	e	LEA, RCDEH, RCPD	1,2
	e. Landfill personnel will be assigned for litter and debris cleanup on-site as well as in the area between the landfill and Joshua Tree National Monument.	SP	i			i		LC	e	RCPD	1,2
	f. Litter control personnel will be designated for direct contact and timely retrieval of stray litter when Joshua Tree National Monument or BLM staff observed or receive reports of wind-borne debris. All litter shall be contained on-site. A helicopter search for blown litter in the vicinity of the project shall be performed every three (3) months for the first 5 years of operation and as needed thereafter as agreed to by the operator and the BLM and NPS. A NPS employee shall be taken along as an observer for all periodic aerial litter searches.	SP	i			i		LC	e	RCPD,NPS	1,2
	g. Coarse tailing material on-site will be used for daily cover, reducing potential dust production.	SP,SWFP	i				i	LC	e	LEA, RCDEH, RCPD	1,2
	h. Haul road within the project area will be paved or regularly watered, as will construction roads for the new railroad spur and Eagle Mountain Road Extension.	AC/PO,SP,PP	i	i				LC	e	SCAQMD, RCPD	
	i. The landfill will operate under a requirement to employ the "Best Available Control Technology" to control fugitive dust, including visible dust, under South Coast Air Quality Management District rules.	AC/PO	i	i				LC	e	SCAQMD	2
	j. See Air Quality 2.k.										

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDTIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

I. VISUAL, RECREATION, AND WILDERNESS RESOURCES - Page 3 of 3

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
5. Potential for significant impacts on views of night skies in the surrounding populated and recreational areas from project night lighting and headlight glare from trucks.	a. Nighttime operations requiring lights, other than landfill liner construction, as required by weather, and public health and safety condtions, will be permitted only in the container handling yard, with only low-level security lighting allowed in the landfill area.	SP,PP	i	i				LC	b	RCPD	2
	b. Lighting required for safety and security will be directed and locational, fixtures will have shields to cut off upward radiation, and light poles will be the minimum height necessary, with the goal of minimizing light spillage.	SP,PP	i	i				LC	a,b	RCPD	1,2
	c. Truck traffic will use 1-10 and Eagle Mountain Road and its extension rather Kaiser Road to reduce visibility from most residences in the area.	SP	i	i				T	b	RCPD	1,2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

J. UTILITIES AND SERVICES - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet- tion	Per Event	Discre- tion				
1. Fire protection impacts from increased demand on fire personnel and equipment and emergency medical services.	a. The landfill will contribute to required fire protection improvements, plans and funding, including a fair share of the operating costs for additional personnel and equipment and additional training for fire personnel to provide the emergency medical service level of training required by the Riverside County Fire Department.	SP,PP					p	LF	c	RCFD, RCPD	1
	b. A detailed plot plan of each planning area will be submitted to the Riverside County Fire Department for review and approval and a written agreement obtained for fire protection services.	PP,GP	i					LB	c	RCFD, RCPD	1
	c. A Fire/Life Safety and Emergency Response Plan will be submitted to the Fire Department.	PP,SWFP			i			LB	c	RCFD,LEA, RCDEH	1
	d. Fire hydrants and water mains will be installed on-site to provide adequate fire flows.	PP,GP	i	i				LB	a	RCFD, RCDB&S	2
	e. The landfill will be required to participate in the fire protection impact mitigation program adopted by the Riverside County Board of Supervisors.	SP,PP					c	LB	c	RCFD,RCBS	1
	f. Clearance from the Fire Department will be obtained prior to project use or occupancy of any existing structures within the project boundary or the Eagle Mountain townsite.	SP,PP			c			LC	c	RCFD	1

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NOO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

K. NOISE - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Operation of the proposed transfer stations could significantly affect adjacent land uses.	a. Construction and operation of all transfer stations will require approval of local jurisdictions, including environmental review under CEQA, to assure compliance with local noise standards and regulations.	*	*	*	*	*	*	*	*	*	*
2. Increased noise levels along the Eagle Mountain rail corridor could affect future residential uses in the Eagle Mountain townsite.	a. Adequate buffer distances from the railroad to residences (150 feet for multi-family, 300 feet for single-family residences) will be required in the future specific plan for the townsite of Eagle Mountain.	EMTSP	i	i			i	PA,PB	a	RCPD	1
3. Truck traffic to the landfill could generate unacceptable noise levels at residences nearby.	a. All landfill-related truck will be required to use Eagle Mountain road and Extension rather than Kaiser Road.	SP	i	i			i	T	b,e	RCPD	2
4. Potential noise impact to residential areas due to landfill operations.	a. Equipment noise from landfill will be approximately 1,000 feet from nearest residential area and shielded from that area by existing berms around the fine tailing ponds.	SP	i					LA,LB, LC	b,e	RCPD	1
	b. Spreading, compacting, and cover of refuse will be conducted only during daylight hours.	SP,SWFP	i	i			i	LC	b,e	RCPD,LEA, RCDEH	1,2
	c. Operations will be phased so that the body of the tailing pile nearest the townsite, which serves as a noise barrier, will be retained for as long as possible.	SP	i	i			i	LC	e	RCPD	2
	d. Maintenance activities in Planning Area No. 2 of the Specific Plan shall occur within enclosed structures.	SP,PP	i	i			i	PA,PC	e	RCPD,LEA, RCDEH	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

L. PALEONTOLOGY - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential for excavation involving improvements to Eagle Mountain Road and the I-10 interchange to destroy paleontological resources.	a. A paleontological monitoring program will be prepared by a qualified paleontologist and submitted to the RCPD, San Bernardino County Museum, and BLM for review and approval.	SP	i					PA	e	RCPD, BLM, SBCM	1
	b. A pre-excavation survey will be conducted to exposed paleontological resources.	SP				i		PA	c	RCPD, BLM	1
	c. Excavation activities will be monitored by a qualified paleontologist.	SP				i		PB	e	RCPD, BLM	1
	d. Recovered fossils will be prepared to a point of identification and stabilization.	SP			i			PD	e	SBCM	1,2
	e. Recovered specimens will be identified, curated, and stored in an established repository.	SP			i			PD	c	SBCM	1,2
	f. A report of findings will be prepared and submitted to the County of Riverside, BLM, and the San Bernardino County Museum for approval.	SP					r	PD	a	RCPD, BLM, SBCM	2

EAGLE MOUNTAIN LANDFILL PROJECT (SPECIFIC PLAN NO. 252) CONDITIONS OF APPROVAL & MITIGATION REPORTING/MONITORING PROGRAM CHECKLIST

M. ENERGY CONSUMPTION/GENERATION - Page 1 of 1

Potential Significant Environmental Effects	Mitigation Measures	Condition of	Checkpoint					Monitor Period	Report Freq.	Monitor/ Report Agency	Sanctions for Non-Compliance
			Plans	Installed	Complet-tion	Per Event	Discre-tion				
1. Potential for consuming more diesel fuel per day than landfills located closer to the waste sources.	a. Diesel locomotives on the Eagle Mountain railway will be shut down when the engines are not needed for an hour or more and will receive regular preventative maintenance, in accordance with manufacturers' recommendations.	SP	i	i				LC	e	RCPD	2
	b. Whenever available, elective versions of landfill equipment including overhead cranes, pugmills, crushers, and conveyors will be used. Where not available, alternative fuel technology will be used depending in air permitting standards.	SP,AC/PO	i	i				LC	e	RCPD, SCAQMD	1,2
	c. When the flare gas generation rate exceeds five million cubic feet per day (MCFD), an analysis of the technical and economic feasibility of recovering energy from the flared landfill gas will be conducted.	AC/PO	i	i			i	LC,LE	e	SCAQMD, USEPA	1,2
	d. If the analysis indicates that energy recovery is feasible, energy recovery facilities shall be installed and operating before the landfill gas generation rate exceeds 10 MCFD.	AC/PO	i	i			i	LC,LE	e	SCAQMD, USEPA	1,2

D. Alternatives Considered in Detail

In addition to the proposed action, the following project alternatives are considered in detail in the EIS/EIR. Within each environmental topic discussed, their impacts are compared with that of the proposed project.

1. Reduced Landfill Operations Alternative

This alternative would allow for the disposal of up to 16,000 tpd in a reduced landfill area. The reduced landfill area would be the same as the proposed project's area, less those areas containing the deepest portions of the East Pit. It would allow for the disposal of 14,000 tpd by rail and 2,000 tpd by truck. Truck traffic is included in this alternative to enable the project to serve potential future demand in Riverside County, which cannot be economically served by rail transportation.

This alternative would have the effect of reducing the capacity of the landfill by approximately 20 percent compared to the proposed project. However, at an inflow of 16,000 tpd, the potential 115-year site life of the project would not be reduced.

2. Proposed Action with Rail Access Only Alternative

This alternative would limit the project to 16,000 tpd of solid waste, delivered by rail only. It would avoid the effects attributable to the 200 truck deliveries per day, but it would also remove some of the operational flexibility of the project. Communities without rail service either could not use the proposed landfill or would have the extra cost of providing truck transport to a transfer station with rail access.

3. No Project Alternative

This alternative would leave the project area in its present disturbed condition and avoid the potential effects of the proposed landfill. It would require continued reliance on existing or new landfills in southern California.

E. Alternatives Considered and Eliminated From Detailed Analysis

1. Landfills in Counties Where Waste is Generated

Potential landfill sites in Los Angeles County were considered, but were eliminated from detailed analysis because of limited capacities and because available information is inadequate. Detailed analysis is not possible at this time because development of landfills in Los Angeles County is remote in planning and processing times and is speculative.

2. Alternative Sites in the Eagle Mountains

The use of the Central Pit or Black Eagle Pit at the Eagle Mountain Mine were considered as possible alternatives. The Central Pit was eliminated from detailed analysis because of limited capacity and because it is remote from and at a substantially higher elevation than the proposed Phase II container handling yard. The Black Eagle Pit was eliminated from detailed analysis because it is closer to the ridgeline that would make the landfill potentially visible from Joshua Tree National Monument and because use of the Black Eagle Pit as a landfill could preclude mining of potential precious metal deposits adjacent to the site.

3. Waste Diversion Programs

Waste diversion strategies such as recycling, green waste composting, and source reduction were considered and eliminated because they may reduce the volume of solid waste disposed of in landfills but would not fully eliminate the need for landfills. Waste combustion for energy was not considered further because of substantial and significant air quality impacts compared to the landfill. Recycling will be conducted at materials recovery facilities as part of the transfer stations for the proposed landfill. Even if recycling achieves state-mandated goals of diverting 25 percent of the waste stream by 1995 and 50 percent by 2000, 20,000 tons per day of landfill capacity would still be required for the remainder of solid waste. Green waste composting could reduce solid waste volumes by up to 30 percent, but the market for the product is uncertain and the composting process may have significant odor, visual, and noise impacts. Source reduction would reduce all impacts associated with the landfill but requires a large-scale legislative program, stringent and large-scale enforcement, and good promotional and educational programs to achieve even a partial reduction in landfill demand.

4. Alternative Railroad Alignment

Potential impacts to the federally threatened desert tortoise could result from reactivation of the Eagle Mountain rail line through the BLM Chuckwalla Bench Area of Critical Environmental Concern (ACEC) due to the possible habitat fragmentation and the direct impact on individual species. This area has been identified in the USFWS's desert tortoise recovery plan as a critical habitat. The only way to avoid crossing the high density tortoise habitat in the Chuckwalla Bench would be to consider other rail routes or the elimination of rail haul entirely. As a result of agency concerns for the welfare of the desert tortoise, three transportation alternatives to avoid high density tortoise habitat were considered. Due to additional environmental impacts resulting from implementation of these alternatives, they were not considered in detail. A brief discussion of each alternative follows.

Three alternatives would be to relocate the railroad to cross the Orocopia Mountains, to construct a new rail line from the Southern Pacific main line in Indio along the Interstate 10 (I-10) corridor to the existing Kaiser Railroad, or to eliminate the rail haul element of the proposed project entirely. However, such alternatives present other environmental problems. First, the Orocopia Mountains represent relatively undisturbed bighorn sheep habitat important to metapopulation movement corridors. Second, the I-10 corridor passes through lower density tortoise habitat; however, the required distance of disturbance for a new rail spur would be twice as long as for the existing rail line. And finally, eliminating rail traffic entirely would require the increase of truck traffic from 100 trucks per day to 1,000 trucks per day. The increased truck traffic would increase emissions of fine PM10, which would be counter to specific efforts within the Coachella Valley to reduce PM10.

F. BLM Preferred Alternative

BLM's preferred alternative for the Eagle Mountain landfill project is the proposed action, as modified by the actions discussed in Section II.B. of this EIS/EIR. The proposed action also includes all mitigation measures contained in the Mitigation Reporting/Monitoring Program located in Section II.C. of the final EIS/EIR.

G. Summary of Impacts and Mitigation

Table 1 summarizes the environmental effects of the proposed project and alternatives. Each environmental issue listed in Table 1 is separated into subissues and evaluated by subissue. The summary table describes potential impact resulting from the proposed project and alternatives, recommended mitigation measures, and resulting level of significance after implementation of recommended mitigation measures.

Impacts occurring as a result of cumulative projects in the vicinity of the proposed Eagle Mountain landfill operation depend on future uses of the area, such as the possible resumption of mining activity. Regionally, continued residential development in and around Blythe and continued development of utilities are anticipated.

Implementation of the landfill project will contribute to the cumulative impacts associated with the degradation of air quality, desert tortoise population fragmentation, habitat loss for Alverson's foxtail cactus, increased regional water consumption, and visual character of adjacent wilderness areas. The cumulative impacts to air quality are considered significant after mitigation, because the project is located in a nonattainment air basin. Also, the project's contribution to the cumulative impact on water consumption in the aquifer is considered significant and not mitigated.

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
WATER QUALITY				
Groundwater Quality				
Impacts	Potential degradation of groundwater due to migration of leachate and/or LFG	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Install liner; install leachate collection and removal system; control landfill gas (LFG) by LFG recovery; install detection groundwater monitoring wells; treat on-site wastewater; install low-permeability final cover to prevent runoff from penetrating landfill; prevent landfill surface erosion; continue all mitigation for 30 years after landfill closure	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Surface Water Quality				
Impacts	Potential pollution of surface waters due to contact with refuse	Same as proposed action	Same as proposed action	No impact

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Mitigation Measures	Install drainage collection system and storm water detention basins; use closed containers to transport waste; compact and cover waste daily; control wind-blown litter with fencing and patrol; control fugitive dust by using both reclaimed and well water	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Groundwater Use and Supply				
Impacts	Will increase overdraft of aquifer	Reduces the capacity of the project by 20 percent with a 10 percent reduction in water use	Same as proposed action	No impact
Mitigation Measures	Truck and container wash water, wastewater, and condensate will be collected, treated on-site, and recycled for dust control	Same as proposed Action	Same as proposed action	None required
Significance after Mitigation	Significant	Significant	Significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
PUBLIC HEALTH AND SAFETY				
Hazardous Wastes				
Impacts	Potential for worker exposure to hazardous wastes at working face of landfill	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Inspect and screen refuse for hazardous wastes at transfer or materials recovery stations, or at an on-site inspection station; remove hazardous waste for disposal at appropriate hazardous waste sites	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Landfill Gas				
Impacts	Potential hazards due to accumulation and migration of landfill gas (LFG)	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Install composite liner to restrict downward and lateral movement of LFG; install LFG recovery/ utilization and migration control system; permanent subsurface LFG monitoring	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	wells near refuse boundary structures, and combustible gas sensors in building interiors; if applicable, install in landfill buildings: impermeable barrier below foundation, active or passive subfloor ventilation, explosion-proof seals for below grade utility conduits, monitor subfloor environment			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Fires				
Impacts	Potential for subsurface landfill fires, surface fires, refuse fires, and fires along rail right-of-way	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Properly operate and maintain the landfill gas collector system; incorporate staged response for control of subsurface fires into the emergency response plan; retain large watering trucks and earth-moving equipment for on-site emer-	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	gency response capabilities; regularly inspect and hand remove vegetation which may pose a fire hazard along rail right-of-way			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Vectors and Disease				
Impacts	Potential for landfill to be used by animals, birds, and insects for foraging and/or breeding may result in an increased potential for disease	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Place earthen material over the refuse on a daily basis; implement raven control plan described as mitigation for biological impacts in this table	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Worker Safety				
Impacts	Potential exposure to noise, dust, odors, landfill gas and condensate, and other unsafe materials	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Develop a standard set of procedures for employee handling of refuse, including use of personal protective equipment, use of enclosed cabs on heavy equipment, rotation of worker assignments, and adequate supervision of personnel; exposure to LFG will be controlled by the collection and disposal system for LFG	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Public Safety				
Impacts	Public exposure to non-hazardous waste resulting from truck or rail accidents, or from delays in rail transport due to catastrophic events or worker strikes	Slightly less than proposed action	Eliminate potential for truck accidents	No impact

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Mitigation Measures	Establish an emergency response plan with adequate staff either on-site or on-call for any clean-up efforts required; containers will be designed to be transported by truck as well as rail to Eagle Mountain or an alternate site	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
TRAFFIC AND TRANSPORTATION				
Rail Operations				
Impacts	Potential conflict with proposed and ongoing rail operations	Slightly less than proposed action (10 daily one-way trains instead of 12)	Same as proposed action	No impact
Mitigation	Schedule trains with Southern Pacific on a contractual basis to prevent conflict with ongoing rail operations; schedule trains to avoid peak-hour vehicle traffic	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
At-Grade Crossings				
Impacts	Surface street vehicular traffic will incur slight delays at at-grade rail crossings; at-grade crossing hazards will be increased slightly	Rail operations will be reduced (10 daily one-way trains instead of 12)	Same as proposed action	No impact
Mitigation Measures	Conduct rail service at night to minimize conflicts with vehicular traffic; install flashing lights to notify drivers and pedestrians of approaching trains at rail crossing at Kaiser Road	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Truck Traffic on Streets				
Impacts	Approximately 100 one-way truck shipments would occur per day; Eagle Mountain Road Extension would create a roadway crossing at Kaiser Road, which serves the community of Eagle Mountain, including local school	Truck traffic is reduced by half	There will be no impacts due to truck traffic	No impact

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Mitigation Measures	Install stop signs at roadway crossing of Eagle Mountain Road Extension and Kaiser Road	Same as proposed action	None required	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
AIR QUALITY				
Emissions				
Impacts	Degradation of air quality due to increased emissions in both the South Coast Air Basin and the Southeast Desert Air Basin due to increased emissions from motor vehicles, including train locomotives, on-highway haul trucks, and off-highway heavy equipment during construction and operation of the landfill	Less truck and rail traffic will result in decreased emissions	Use of rail only will result in decrease in emissions	Continued degrading of air quality in South Coast Air Basin from use of existing or new landfills
Mitigation Measures	Shut down diesel locomotives when engines are not needed for one hour or more; use diesel fuel and engines certified by the California Air Resources Board; install energy recovery or pollution	Same as proposed action	Same as proposed action	None available

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	equipment when warranted for LFG equipment; perform feasibility studies for use of selective catalytic reduction or natural gas fuels on Eagle Mountain locomotives and provide report of studies; implement studies, if feasible, or operate locomotives such that NOx emissions do not exceed 6 gm/bhp-hr, or levels allowed by CARB, whichever is more stringent; conduct cost study of electrifying Eagle Mountain railway when LFG generation warrants recovery facility; incorporate other control measures as required by CARB/APCD			
Significance after Mitigation	Impacts will not be reduced below a level of significance	Impacts will be less than the proposed project but not reduced below a level of of significance	Impacts will be less than proposed project but not reduced below a level of significance	Continued significant impacts in South Coast Air Basin and Southeast Desert Air Basin

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Ambient Concentrations				
Impacts	Pollutant concentrations at typical rail crossings are not significant; exceeds state standards for Ozone and state and federal standards for PM10 at the landfill site	Slightly reduced emissions from proposed action	Similar to reduced operations alternative	No impact to SEDAB
Mitigation Measures	Same measures as for emissions from proposed action identified above	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Impacts will not be reduced below a level of significance	Impacts will be less than proposed project but not reduced below a level of significance	Impacts will be less than proposed project but not reduced below a level of significance	No impact to SEDAB
Health Risk Assessment				
Impacts	Potential for increased health risk to area residents due to exposure to LFG	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Interception and removal of hazardous wastes within waste stream; install LFG recovery/utilization and migration control system and permanent subsurface LFG monitoring wells	Same as proposed action	Same as proposed action	No impact

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Significance after Mitigation	Not significant	Not significant	Not significant	No impact
Fugitive Dust				
Impacts	Excessive fugitive dust from handling and transfer of solid waste and cover material	Less fugitive dust than proposed action	Similar to reduced operations alternative	No impact to SEDAB
Mitigation Measures	Use water and chemical dust suppressants on unpaved roads, work areas, and during construction of pit benches, ditches, etc; pave permanent haul roads; prewater tailing piles prior to excavation; pass haul trucks through wheel washing stations or mechanically sweep roads	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Impacts will not be reduced below a level of significance	Impacts will be less than proposed project but not reduced below a level of significance	Impacts will be less than proposed project but not reduced below a level of significance	No impact to SEDAB

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Consistency with Regulatory Programs				
Impacts	Statutory requirements ensure consistency with regulatory programs	Same as proposed action	Same as proposed action	None required
Mitigation Measures	Application, permit review, imposition of control conditions, approval, and inspection processes of the SCAQMD will serve to enforce consistency	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	None required
LAND USE				
Existing Uses				
Impacts	Landfilling would render existing iron ore reserves unrecoverable	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Phase landfill operations to assure that iron ore reserves most feasible to mine are impacted last to allow for recovery if economically justified	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Significance after Mitigation	Not significant	Not significant	Not significant	None required
Surrounding Uses				
Impacts	Potential impacts to existing residential use and correctional facility	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Restrict truck traffic to designated roads; maintain minimum 25-foot setback and maximum 60-foot height for all project buildings; maintain berms to partially obscure views onto project site; control fugitive dust and odors; install sound attenuating walls as needed	Same as proposed action	Not significant	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Consistency with Plans and Policies				
Impacts	The project would require a BLM land exchange and County General Plan amendment and zone change to make the project consistent with existing plans	Same as proposed action	Same as proposed action	No impact

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	None required
DRAINAGE				
Impacts	Potential drainage impacts to the East Pit, townsite, and alluvial areas east of the project site	Same as proposed action	Same as proposed action	Continued inadequate drainage at the East Pit, townsite, and alluvial areas east of the project site
Mitigation Measures	Install perimeter drainage system to accommodate 100-year storm flows with a 500-year frequency standard channel freeboard design; limit final landfill slope to not more than 3 percent for drainage	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
BIOLOGY				
General				
Impacts	Supervision of biological mitigation monitoring/ reporting program	Same as proposed action	Same as proposed action	No impact

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Mitigation Measures	Landfill operator will retain qualified consulting biologist to supervise all aspects of the biological mitigation monitoring/reporting program; file annual reports on status of all biological mitigation activity	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Desert Tortoise				
Impacts	Permanent loss of individuals and habitat, potential increased raven predation, potential harassment of individuals (noise and vibration)	Same as proposed action	Avoids permanent loss of habitat (widening of Eagle Mountain Road), and impacts from truck traffic; other potential impacts similar to proposed action	No impact
Mitigation Measures	Survey and monitor prior to and during construction/maintenance, relocate individuals from railroad bed; install culvert system and protective fence along first 4 miles of Eagle Mountain Road and portions of railway; install ballast between tracks; precede trains and remove tortoises from track; monitor	Same as proposed action	Same as proposed action but delete off-site preservation	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	tortoise population for life of project; maintain speed limit on Eagle Mountain Road; remove road kills daily; preserve off-site habitat; monitor raven population; passive and active control of ravens; monitor and control coyotes and kit foxes; worker/ townsite education			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Bighorn Sheep				
Impacts	Loss of 4 water sources and habitat; potential indirect effects from increased human population; potential disruption of sheep movement	Impacts would be slightly reduced	Same as proposed action	No impact
Mitigation Measures	Install three permanent water sources far from mine site to encourage bighorn sheep to use surrounding natural areas; these sites and their design to be approved by biologists at BLM and CDFG; rehabilitate Buzzard Springs and clear of tamarisk; if sheep are not	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	naturally expanding their ranges to incorporate new sources, translocate them; preserve buffer habitat areas around landfill (644 acres); monitor sheep movement; conduct employee/townsite awareness program			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Desert Pupfish				
Impacts	Potential impacts from rail accident or major construction on trestle over habitat	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	If major construction is necessary, incorporate protective measures in plans and monitor construction/maintenance activities; include biologist on on emergency response team and restore any habitat disturbed by construction/accident	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Other Sensitive Wildlife				
Impacts	Potential loss of California leaf-nosed bat roosting areas; increased raven predation on Eagle Mountain scrub jay	Slight reduction on overall habitat loss	Same as proposed action	No impact
Mitigation Measures	Monitor bat roost sites; maintain adit opening; monitor and control ravens	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Sensitive Plant Species				
Impacts	Loss of 158 acres of foxtail cactus habitat	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Preserve 157 acres of foxtail cactus on-site; initiate transplant program for lost cacti on suitable areas within project boundary; monitor transplants once a month for one growing	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	season; submit monitoring report to BLM, CDFG, and USFWS			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Major Washes and Drainages				
Impacts	No significant impacts to wetlands are anticipated to occur from this project	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
GROWTH INDUCEMENT AND SOCIOECONOMICS				
Growth Inducement				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impacts
Mitigation Measures	None required	Same as proposed action	Not significant	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Socioeconomics				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impacts
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
GEOLOGY				
Soils and Geology				
Impacts	Potential exists for settlement within alluvial soils, for expansive soils, and for surficial instability	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Identify expansive soils in alluvial material within the landfill footprint and regrade, as necessary; determine the safe slope angles and maintain slopes within this range; identify need to flatten slopes or construct fill buttresses; excavate and/or recompact unsuitable soils prior to liner construction; place liner against safe slope angles	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Seismicity				
Impacts	Potential ground shaking	Same as proposed action	Same as proposed action	No impacts
Mitigation Measures	Progressively remove loose rock and materials on areas immediately above the working face of the landfill, and construct berms to intercept fallen rock	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Mineral Resources				
Impacts	Potential loss of recoverable iron ore reserves	Approximate 50 percent reduction of proposed project's impacts	Same as proposed action	No impact
Mitigation Measures	Sequence landfill operations so as to impact mineral resources last to allow for recovery prior to impact	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
VISUAL, RECREATION, AND WILDERNESS				
Visual Contrast				
Impacts	Potential for increased visual contrast	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Blend the topographic contours of the landfill with adjacent landforms, and minimize color and tone contrast of the final cover; revegetation of the landfill will further reduce visual contrast impacts	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Same as proposed action	Same as proposed action	None required
Views from Desert Center and Other Key Observation Points				
Impacts	No significant impact	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Views from Eagle Mountain Townsite				
Impacts	The proposed action will have a significant impact on the views from the community of Eagle Mountain; however, that impact will not be visible for several decades; visual contrast will be decreased over time	The reduction in size and scale of the landfill would serve to reduce visual impact as compared to the proposed action	Incremental improvement over proposed action	Currently, the views from the community are significantly impacted by the imposing tailing pile, the exposed slopes, and scarred areas; this high level of impact would remain
Mitigation Measures	Phase project, revegetate disturbed areas, and revitalize community	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	A significant impact is associated with this alternative
Windblown Debris and Dust				
Impacts	Potential for windblown debris and dust	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Transport all refuse materials to the site and to the face of the landfill in closed containers, compacted and covered on a daily basis; water haul roads regularly; install fencing and regularly patrol	Same as proposed action	Incremental improvement over proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	for litter retrieval; develop an active storm and early warning procedure for extremely windy conditions and response plan to ensure timely and complete cleanup of accidental spills			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Night Lighting				
Impacts	Potential for visually impacting the surrounding area by night lighting	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Limit landfill activities other than the container handling operation and liner installation to daylight hours; provide low-pressure sodium safety and security lights; direct lighting downward to light only the immediate area	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Recreation				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Wilderness				
Impacts	Indirect impacts associated with increased activity visible from Wilderness Study Areas (WSAs)	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Location and design of landfill and reduction of visual contrast	Same as proposed action	Same as proposed action	Continued low level of impact to WSAs
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
UTILITIES AND SERVICES				
Water and Sewer				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Not significant	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Fire and Police				
Impacts	No significant impacts were identified for police protection; significant fire protection impacts were identified due to inadequate and poor hydrant placement and pressure	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required for police protection; obtain written agreement for fire protection services from the Riverside County Fire Department; submit a Fire/Life Safety and Emergency Response Plan to the Fire Department; install water mains and fire hydrants to provide the required fire flows; participate in the fire protection impact mitigation program as adopted by the Riverside County Board of Supervisors	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Utilities				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Community Facilities				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
NOISE				
Short-term Construction Noise				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Rail Operations				
Impacts	Potential impacts to non-human receptors are not considered significant; potential noise impacts to future land uses	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Install sound attenuating walls as needed	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
Truck Traffic				
Impacts	Increases are not significant; only residences close to I-10 may experience CNELs above 65 dBA	Same as proposed action	There would be no noise impacts from truck traffic	No impact
Mitigation Measures	Require truck traffic to use the Eagle Mountain Road interchange and access to the project site	Same as proposed action	None required	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
On-site Landfill Operations				
Impacts	The potential exists for residences located within 500 feet of the project site to experience occasional significant noise levels during operations to remove cover material from the large tailing pile	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	Maintain the body of the tailing pile to serve as a noise barrier for as long as possible and specific restrictions on operations in this area	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
CULTURAL RESOURCES				
Cultural Resources of Riv-3798 and Riv-3216				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Native American Concerns				
Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
PALEONTOLOGY				
Impacts	Excavations within portions of Eagle Mountain Mine improvements to Eagle Mountain Road at the I-10 exit have the potential to impact paleontologic resources; rehabilitation and maintenance of the rail line will not impact paleontology resources	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	A program to mitigate impacts to paleontologic resources will include a preexcavation survey, excavation monitoring, fossil preparation and identification, and preparation of a report by a qualified paleontologist; this report shall be submitted to Riverside County, BLM, and	Same as proposed action	Same as proposed action	None required

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	San Bernardino County Museum; rehabilitation and maintenance of the rail line will not require mitigation			
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
ENERGY				
Impacts	Project implementation will require more fuel per day than landfills located closer to the waste sources	Will require more fuel per day than landfills located closer to the waste sources, but less than proposed action	Will require more fuel per day than landfills located closer to the waste sources, but less than proposed action	Landfills located closer to the waste sources would continue to use energy to transport and process waste
Mitigation Measures	A preventative maintenance program would be implemented for the rail line and at the landfill site to maintain the operating efficiency of equipment and vehicles; use electric versions of landfill equipment wherever possible; conduct feasibility of converting LFG to energy source if feasible, install and operate energy recovery system before LFG generation exceeds 10 MCFD	Same as proposed action	Same as proposed action	None available

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

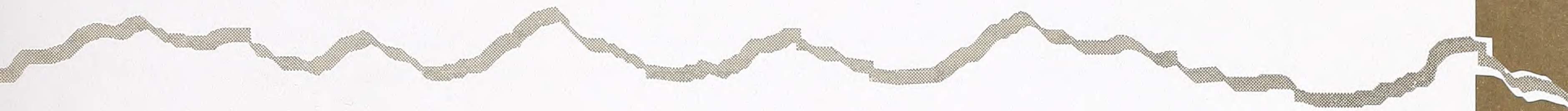
Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Significance after Mitigation	Not significant	Not significant	Not significant	Not significant
CUMULATIVE				
Health and Safety; Traffic Land Use; Growth and Socioeconomics; Visual, Recreation, and Wilderness; Utilities and Services; Noise; Cultural; Energy				
Cumulative Impacts	No significant impacts	Same as proposed action	Same as proposed action	No impact
Mitigation Measures	None required	Same as proposed action	Same as proposed action	None required
Significance after Mitigation	Not significant	Not significant	Not significant	
Groundwater Use and Supply				
Cumulative Impacts	Will increase overdraft of aquifer	Reduces the capacity of the project by 20 percent with a 10 percent reduction in water use	Same as proposed action	No impact
Mitigation	Treat wash water, waste water, and condensate, and recycle for dust control	Same as proposed action	Same as proposed	Same as proposed action for other projects
Significance after Mitigation	Significant	Significant	Significant	Significant

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
Air Quality				
Cumulative Impacts	Will increase emissions in two nonattainment basins	Incremental improvement over proposed action	Same as proposed action	Significant cumulative impacts
Mitigation Measures	Implementation of South Coast Air Quality Management Plan	Same as proposed action	Same as proposed action	Same as proposed action for other projects
Significance after Mitigation	Significant until year 2007	Same as proposed action	Same as proposed action	Same as proposed action
Biological Resources				
Cumulative Impacts	Potential desert tortoise population fragmentation due to reactivation of Kaiser railroad; potential loss of substantial populations of Alverson's foxtail cactus due to project implementation	Same as proposed action	Same as proposed action	Potential of similar impacts in other project areas
Mitigation Measures	Preoperation surveys, monitoring raven control plan, clean out and repair existing culverts under the railroad, evaluate the optimum locations to install additional culverts and barriers if needed, and construct as appropriate, place ballast between the rail tracks, employee/townsite	Same as proposed action	Same as proposed action	Similar to proposed action

TABLE 1
SUMMARY OF PROJECT ALTERNATIVES' IMPACTS AND MITIGATION
(continued)

Issues	Proposed Action	Reduced Landfill Operations	Rail Access Only	No Project
	education, off-site habitat preservation for desert tortoise; habitat preservation and salvage for public use of cactus species			
Significance after Mitigation	Not significant	Same as proposed action	Same as proposed action	Not significant



SECTION III

AFFECTED ENVIRONMENT

III. Affected Environment

A detailed description of the affected environment is found in the draft EIS/EIR on pages 111-316 and Appendixes A through K (Volumes I and II). Since the preparation of the draft EIS/EIR, minor changes in the description of the affected environment have been incorporated in the final EIS/EIR as a result of new EPA regulations and responses to public comments. These changes are summarized in Section II.B. of the final EIS/EIR. See Section V.D. of the final EIS/EIR for a list of locations where the draft EIS/EIR is available for review.

SECTION IV

ENVIRONMENTAL CONSEQUENCES

IV. Environmental Consequences

A detailed analysis of the proposed action and alternatives is found in the draft EIS/EIR on pages 317-603 and Appendixes A through K (Volumes I and II). Since the preparation of the draft EIS/EIR, minor modifications have been incorporated in the proposed action as a result of new legislation and responses to public comments. These changes are summarized in Section II.B. of the final EIS/EIR. In addition, updated analyses (specifically for air quality) have been performed since the preparation of the draft EIS/EIR using the most recent information available. The results of this analysis appears in Appendixes L through N (Volume III) of the final EIS/EIR. See Section V.D. of the final EIS/EIR for a list of locations where the draft EIS/EIR is available for review.

SECTION V

CONSULTATION AND COORDINATION

V. Consultation and Coordination

A. Scoping

The process used to identify the scope and contents of the draft EIS/EIR is described in the draft EIS/EIR.

B. Public Review

The state public review period ended on September 7, 1991, and the federal public review period ended on September 17, 1991. One hundred seventy separate letters were received. Individual comments occurring within these letters amounted to approximately 1,800. The subjects of the comments were distributed among the 15 issues covered by the EIS/EIR. A majority of the comments identified concerns about the project description, protection of the groundwater, truck traffic, air quality in the Coachella Valley and Joshua Tree National Monument, biological resources in the project vicinity, and the general public health and safety risks posed by the proposed project. Volume II of the final EIS/EIR contains the letters of comment, and Volume I contains responses to the comments.

C. Public Hearings

1. Federal

The Bureau of Land Management held two hearings for public input to the EIS/EIR. These hearings occurred prior to the close of the public response period and, thus, were included in the Responses to Comments, document numbers 0026 and 0027 of the final EIS/EIR. They were held at the following locations:

Palm Desert - August 27, 1991
Desert Center - August 28, 1991

2. County

The County of Riverside Planning Commission conducted nine public hearings to gather public input related to the proposed project. The applicant, Mine Reclamation Corporation, presented relevant material in response to both public and Planning Commission comments and questions. These hearings were conducted in several locations throughout Riverside County on the following dates:

September 18, 1991 (Bermuda Dunes)
October 6, 1991 (Desert Center)
November 6, 1991 (Riverside)
November 13, 1991 (Bermuda Dunes)
January 22, 1992 (Bermuda Dunes)
February 26, 1992 (Bermuda Dunes)
May 6, 1992 (Bermuda Dunes)
June 10, 1992 (Riverside)
June 17, 1992 (Bermuda Dunes)

The first hearing occurred prior to the close of the public comment period and, thus, is included in the Responses to Comments of the final EIS/EIR (Document No. 0102). The issue of most concern to the public and the Planning Commission was the protection of groundwater quality in the Chuckwalla Valley. Measures to protect groundwater have been incorporated into the project design, and a thorough regulatory and enforcement program is administered by the California State Water Resources Control Board (SWRCB) and its local Regional Water Quality Control Board and by the California Integrated Waste Management Board (CIWMB) and the local County Department of Health acting as the LEA for the state. These measures and the existing enforcement apparatus would avoid the potential for significant groundwater pollution.

Another strongly voiced concern related to the potential increased degradation of air quality in the Coachella Valley and Joshua Tree National Monument. Measures to reduce air quality impacts are included in the project design, and a rigorous regulatory and enforcement program is administered by the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (ARB), and the Environmental Protection Agency. Nevertheless, the increases in air emissions in the South Coast Air Basin (SCAB) resulting from the long-distance transport of solid waste and the incremental increase of emissions in the Southeast Desert Air Basin cannot be entirely avoided and remain significant.

Other issues such as traffic, noise, and biological impacts associated with the transportation of solid waste were raised. These issues were found to be either not significant or mitigated below a level of significance. The issue of the acceptability of transporting solid waste from outside the county of Riverside for disposal inside the county is a policy question which must be decided by County officials.

D. List of Agencies, Organizations, and Persons to Whom Copies of the Final EIS/EIR Are Sent

State public review of the draft EIS/EIR was initiated on July 9, 1991, by the filing of the Notice of Completion by the County of Riverside with the State Office of Planning and Research, as required by CEQA. Federal public review of the draft EIS/EIR was initiated on July 19, 1991, by the publication of the Notice of Availability in the Federal Register by the BLM. The state public review period ended on September 7, 1991, and the federal public review period ended on September 17, 1991.

Ten copies of the final EIS/EIR were mailed to the Office of Planning and Research (OPR) for distribution to state agencies. Twenty-two copies were also sent to various federal agencies. Copies of the final EIS/EIR were placed in the following libraries:

BLM Library
SC-324 A, Building 50
Denver Federal Center
Denver, CO 80225

California State Library
Governmental Publications
Sacramento, CA 94237

Coachella Branch Library
1538 Seventh Street
Coachella, CA 92236

Los Angeles Public Library
Dept. of Science, Tech., and Patents
630 West Fifth Street
Los Angeles, CA 90071

Palm Desert Branch Library
45480 Portola
Palm Desert, CA 92260

Palm Springs Library Center
300 South Sunrise Way
Palm Springs, CA 92262

Palo Verde Valley District Library
125 West Chanslor Way
Blythe, CA 92225

Desert Hot Springs Branch Library
11691 West Drive
Desert Hot Springs, CA 92240

Indio Branch Library
200 Civic Center Hall
Indio, CA 92201

Lake Tamarisk Branch Library
43880 Lake Tamarisk Drive
Desert Center, CA 92239

San Bernardino County Library
Joshua Tree Branch
6465 Park Boulevard
Joshua Tree, CA 92252

San Bernardino County Library
Yucca Valley Branch
57098 Twentynine Palms Highway
Yucca Valley, CA 92284

San Bernardino Public Library
Feldheym Central Library
555 West Sixth Street
San Bernardino, CA 92410

U.C. Riverside Library
Government Publications
201 East La Habra Boulevard
La Habra, CA 90631-0337

Riverside County/City Public Library
Central Library
Government Publications
3581 Seventh Street
Riverside, CA 92501

and are available for inspection at the following offices:

County of Riverside Planning Dept.
4080 Lemon Avenue, 9th Floor
Riverside, CA 92501

County of Riverside Planning Dept.
79733 Country Club Drive, Suite E
Bermuda Dunes, CA 92201

Bureau of Land Management
California Desert District
6221 Box Springs Road
Riverside, CA 92507

Bureau of Land Management
California State Office
Federal Office Building
2800 Cottage Way, Room E-2841
Sacramento, CA 95825

Bureau of Land Management
Palm Springs-South Coast Resource Area
63-500 Garnet Avenue
North Palm Springs, CA 92258-2000

In addition, copies were mailed to other agencies, local governments, and interested groups and individuals.

E. Section 7 Consultation

Consultation with the U.S. Fish and Wildlife Service is required by Section 7 of the Endangered Species Act, because the proposed land exchange and resumption of intensive use of railroad operation could affect populations of the federally endangered desert pupfish and the federally threatened desert tortoise. The Biological Assessment was transmitted to the USFWS on April 21, 1992. The biological opinion rendered by the USFWS may result in the incorporation of additional terms and conditions to protect the threatened and endangered species. The final results of the consultation will be included in the BLM Record of Decision.

SECTION VI

SUMMARY OF MAJOR CONCERNS AND ISSUES

VI. Summary of Major Concerns and Issues

A. Protection of Groundwater

Of most concern to both the general public and many agencies prior to, during, and after publication of the draft EIS/EIR is protection of the groundwater under and adjacent to the proposed landfill. The draft EIS/EIR, two engineering studies, and an independent review of the project by the County of Riverside Waste Management Department's consultant concurred that the greatest potential for groundwater contamination from this project is not from the release of free leachate, but from the migration of landfill gas (LFG). Additionally, the Environmental Protection Agency passed new regulations in October 1991 (subtitle D) requiring composite liners for all landfills.

Consequently, as discussed in Section II.B.1 of the final EIS/EIR, a composite liner will be installed over the entire area underlying refuse, not just some portions as discussed in the draft EIS/EIR. This liner system will include a HDPE liner, also referred to as a flexible membrane liner, placed on top of a layer of low-permeability soil. This composite liner system placed under and around the refuse and working in conjunction with a series of additional measures: (1) leachate and gas minimization; (2) leachate and gas containment; and (3) leachate and gas collection and removal will meet all the requirements of the new subtitle D to protect the area's groundwater resources. These mitigation measures coupled with design features of the project lower the potential adverse impacts to below a level of significance.

B. Air Quality

Another important concern of the public and agencies is the fact that the proposed action's air pollution emissions, even after mitigation, would still exceed thresholds used in the EIS/EIR to determine the significance of impacts. Nevertheless, the proposed action will not violate any state or federal air quality standards. Using a year's worth of meteorological monitoring data collected on-site, several of the specific conclusions in the draft EIS/EIR have been changed from "significant" to "not significant." The results of the revised modeling show that project impacts (including those at the Joshua Tree National Monument) will not exceed federal Class I or II increments; the project will not result in an unacceptable health risk; and the project will not impair visibility. And, finally, Attachment 11 of Appendix M of the final EIS/EIR documents that the EPA considers the project a "minor" source of emissions and not subject to federal EPA's Prevention of Significant Deterioration (PSD) regulations. The project is subject to the South Coast Air Quality Management District's regulation.

The project includes mitigation measures consistent with the best available control technology (BACT) and includes operational measures for landfill equipment with combustion engines; electrification of landfill equipment where available; control of fugitive dust by paving, use of dust suppressants, and suspension of operations in high winds; maintenance and operating strictures for truck and locomotive engines; shutdown, maintenance, operating, and emission control procedures for heavy waste-handling equipment; and installation of a landfill gas recovery system with regulated flare or energy-recovery disposal of collected gases. The project also includes a feasibility study for electrification of the Eagle Mountain railroad and two feasibility studies to evaluate the potential for use of selective catalytic reduction (SCR) or natural gas fuels to reduce locomotive NOx emissions.

C. Truck Traffic

In response to the citizens' of Coachella Valley concerns about the truck transportation of refuse from west of the valley on I-10 to the Eagle Mountain landfill, the truck portion of the project has been reduced by one-half. As now proposed, the project would set a limit of 100 truck round trips per day from all sources. After three years of operation, there would be no more truck-hauling of waste from outside the desert communities (west of the Coachella Valley), and the limit of 100 truck round trips per day would apply throughout the life of project, except for emergency interruptions of railroad operations.

The analysis in Attachment 10 of Appendix M of the final EIS/EIR discusses in detail that, with mitigation, the total NOx and CO emissions for the reduced truck modification are approximately three percent higher than for the proposed project as discussed in the draft EIS/EIR. In contrast, total VOC, SO_2, and PM10 emissions for the reduced truck modification are lower than for the proposed project in the draft EIS/EIR and would, therefore, result in fewer air quality impacts. As to the increases in NOx and CO emissions, the magnitude of those additional impacts is not substantial nor significant given the small percentage (that is, three percent) of those increases. The NOx and CO emissions, therefore, do not require a change in the mitigation measures recommended in the draft EIS/EIR. The draft EIS/EIR's conclusion that air quality impacts would be significant, even with mitigation, would remain valid.

D. Desert Tortoise

Construction and operation of the landfill, access roads, and railroad could adversely affect the federally threatened desert tortoise. The EIS/EIR requires the landfill operator to retain a qualified biologist to supervise all biological mitigation and report to trustee or resource agencies. Mitigation for the potential loss of tortoises due to road and railroad traffic includes monitoring tortoises near the road and railroad, relocating tortoises out of harm's way, and constructing barriers and culverts to keep tortoises off the traveled ways. An extensive control program for ravens, coyotes, kit foxes, and other potential tortoise predators will be developed and activated for the life of the project. Also, a mandatory local worker and truck driver education program will be implemented with voluntary participation by local townsite -residents.

Potential impacts to the desert tortoise could result from reactivation of the Eagle Mountain rail line through the BLM's Chuckwalla Bench ACEC due to the possible habitat fragmentation and the direct impact on individual species. This area has been identified in the USFWS's desert tortoise recovery plan as a critical habitat. BLM's Endangered Species Act consultation with the USFWS will guarantee mitigation (discussed above) which will prevent the project from jeopardizing the desert tortoise species. The biological assessment and recommended mitigations for the tortoise and other endangered or candidate species is included in Appendix N of this EIS/EIR.

E. Joshua Tree National Monument

Of great concern to the National Park Service and to several individual commentors are the proposed action's potential impacts to Joshua Tree National Monument (JTNM). Of most concern is the proximity of the project to the Monument, a Class I air quality unit and World Biosphere Reserve, as well as a designated wilderness area. Several areas of concern include:

1. Air Quality

The draft EIS/EIR used a screening analysis to conservatively identify potential impacts to the Monument that could cause Class I increment exceedances. Since the release of the draft EIS/EIR, a year's worth of meteorological monitoring data has been collected on-site. The results of the revised modeling show that project impacts (including those at the Joshua Tree National Monument) will not exceed federal Class I or II increments; the project will not result in an unacceptable health risk; and the project will not impair visibility. Also, two permanent PM10 monitoring stations will be installed either pursuant to provisions in SCAQMD Rule 403 or at locations chosen in consultation with NPS.

2. Biology

Specific concerns expressed by the NPS relative to biology are the possible predation by ravens, coyotes, and kit foxes attracted to the landfill on the tortoise population in the Pinto Basin, and the potential cumulative effects from the project on the natural community structure and resilience of the nearby desert ecosystem. Because of the distance and topographic barrier between the project site and JTNM, it is not possible at this time to determine what these effects may be. The duration of the project (more than 100 years), however, demands regular evaluation to determine if adverse impacts materialize. Mitigation for the desert tortoise is discussed above and is governed by the Section 7 consultation. As a condition of approval of the County of Riverside and BLM, a long-term monitoring team and a Monitoring and Research Methodology Oversight Committee will be created to review all biological species and to work with the Citizen's Oversight Committee (see Section II.C. of this EIS/EIR).

The long-term monitoring team would implement monitoring and complete inventories of animals and vegetation on the BLM and Monument lands adjacent to the proposed landfill. All components of natural systems would be considered including species not already protected by listed status. The team would look at biodiversity, present distributions of organisms and use GIS, satellite imagery, or other remote sensing tools for mapping. Monitoring protocols and guidelines would be developed by the technical advisory committee in cooperation with university experts such as those already included in the NPS's Cooperative Park Studies Units. These professional contacts would assure accessible advice, detailed peer review, and objective implementation of experimental designs. The funding and assignment of specific monitoring responsibilities among MRC, NPS, BLM, and USFWS staff will be determined and set forth in a Memorandum of Understanding among these parties.

3. Windblown Litter and Dust

A concern has been expressed by the NPS that windblown debris and dust not intrude into the Monument's boundaries or degrade the wilderness experience. The draft EIS/EIR acknowledges that ". . . summer rainstorms . . . in July and August . . . are intense and the prevailing directional winds from the south and southeast could scatter litter well into the Eagle Mountains, the Pinto Basin area, and beyond" (page 515). Also, Appendix M, Attachment 7 of this EIS/EIR contains atmospheric data collected on-site that accurately portrays weather patterns of the area.

It should be noted that the project's operation is quite different from conventional landfills. All waste entering the landfill must be processed for materials recovery and recycling away from the landfill and compacted into closed containers which must remain closed until the containers are opened near the face of the landfill. The waste will come out of the containers in large clumps or plugs and be spread by a compactor tractor. This refuse will be pushed to the face of the landfill where it will be compacted and covered with at least six inches of soil. This process will minimize the opportunity for the wind to pick up litter. Additionally, portable litter fencing at each cell will catch windblown litter.

Next, full-time personnel will be assigned to litter control. Because the landfill site is quite large, the operator will be able to contain windblown litter within the site boundaries by intensifying the labor effort when necessary. The operator is committed to preventing any litter from leaving the landfill's boundaries. Moreover, there is a large area within the Eagle Mountains which can be patrolled for litter prior to litter entering the monument. Finally, as a last resort, if Monument personnel determine that a problem from windblown litter is developing, they will call the landfill operator for timely removal of any litter which has entered the monument. This procedure was requested by park personnel during meetings held at the park in 1990. All costs will be assumed by the landfill operator.

Finally, as pointed out in the draft EIS/EIR (p. 270), the project area is separated from the Monument by a major ridgeline (elevation 2,000 feet to 3,500 feet) which blocks views from the Monument into the project area. This ridgeline can also pose as a natural barrier to windblown debris, allowing for litter control before litter reaches the Monument boundaries. Also, implementation of a storm warning system would allow for the closing of landfill operations and the cover of litter prior to the arrival of a potentially windy storm.

Implementation of the design features listed on pages 515 and 516 of the draft EIS/EIR would ensure that impacts due to windblown debris and dust would be below a level of significance.

F. Hazardous Waste

An important concern expressed by the public is that the proposed landfill not accept hazardous waste. With regard to this point, all waste entering the landfill will be required to be processed for materials recovery and recycling away from the landfill and compacted into closed containers which must remain closed until the containers are opened near the face of the landfill. The Class III nonhazardous sanitary landfill will not accept the following substances: liquid wastes, hazardous wastes, sewage sludge, incineration ash, radioactive wastes, biological wastes, infectious wastes, and other special solid wastes such as whole car bodies.

Load-checking of incoming refuse would occur at a MRF to remove hazardous materials. However, as part of the proposed project, MRC would institute a periodic inspection program at the landfill to monitor the continued compliance and effectiveness of the load-checking programs. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the LEA (County of Riverside Department of Health).

As part of the random inspection process at the landfill, the LEA will designate specific containers as loads for inspection. These will be diverted to the on-site waste inspection facility for thorough inspection. The origin of loads found not to be in compliance will be noted and appropriate action taken. In the event that hazardous or other unacceptable materials are identified during the random inspection at the landfill, they will be removed from the site by properly licensed personnel. The responsible party will be notified that the wastes were illegally deposited at the site and will be charged for the disposal costs incurred. All incidents will be reported to the Colorado River Basin RWQCB at Palm Desert and the Riverside County Department of Health.

G. Errata

The following section contains minor corrections and modifications to the text of the draft EIS/EIR based on comments received during the public review period. The comments which raised these corrections are listed at the conclusion of the reference.

Table 50 (page 573). The table has been revised to show the correct amount of fuel consumed by the packer trucks and transfer/trailer rigs. The revised table follows this page. See Comment 0164-26.

Page 574. The daily fuel consumption data summarized at the top of the page should read "refuse transportation = 4,000 gallons; total = 17,800 gallons; this total corresponds to 0.89 gallon of fuel consumed per ton of refuse disposed." See Comments 0087-4, 0099-13, and 0164-26.

Table 51 (page 575). The data on diesel fuel use associated with rail haul of 20,000 tons per day of refuse should read "21,404 gallons per day" instead of "10,425 gallons per day." Also, a footnote has been added to clarify that each truck will make two round trips per day. See Comments 0083-2b, 0090-1a, 0099-13, 0111-1, 0111-48, and 0164-8.

Page 579. The daily fuel consumption data summarized at the top of the page should read "refuse transportation = 2,000 gallons; total = 13,850 gallons; this total corresponds to 0.87 gallon of fuel consumed per ton of refuse disposed." See Comments 0099-13 and 0164-26.

Table 53 (page 580). The data on diesel fuel use associated with rail haul under the Reduced Operations alternative (16,000 tpd) should read "18,672 gallons per day" instead of "6,950 gallons per day." See Comments 0090-1a.

In addition to the corrections and modifications provided above in response to public comments, additional revisions were made to the text of the draft EIS/EIR based on internal review by the County of Riverside and the Bureau of Land Management. These revisions are presented below.

Page 304, paragraph 3, sentence 2. The reference to the "lower California desert" should be replaced with the "Colorado Desert."

Page 305, paragraph 2, sentence 2. The reference to "valleys surrounding the California desert" should read "valley floor surrounding the Salton Sea."

Page 585, Cumulative Projects, Eagle Mountain and Vicinity. CEQA does not require that agencies discuss the cumulative impacts of other projects, if those projects were applied for after the time the draft EIS/EIR for the subject project was released to the public. However,

TABLE 50
COMPARISON OF VEHICLES AND EQUIPMENT REQUIRED FOR TRANSPORT AND DISPOSAL FOR PROPOSED PROJECT AND REDUCED OPERATIONS ALTERNATIVE

Vehicles	20,000 TPD	16,000 TPD
Transportation		
8-ton capacity packer trucks	500 gal	250 gal
25-ton capacity transfer/trailer rigs	160 gal	80 gal
22-ton capacity transfer/trailer rigs	182 gal	61 gal
Transfer Operations (Each Station)	5 Stations	4 Stations
200-hp rubber tired loaders	3 Stations	3 Stations
225-hp container handlers	2 Stations	2 Stations
225-hp train car spotter	1 Station	1 Station
Container Handling		
225-hp container handlers	2 @ ea. rail spur	2 @ ea. rail spur
300-hp container handlers	32	26
300-hp overhead cranes	4	3
225-hp container handlers	2	2
Landfill Disposal		
310-hp refuse compactors	12	10
335-hp crawler tractors	10	8
650-hp off-highway trucks	5	4
375-hp rubber tired loaders	2	2
335-hp crawler tractors	3	2
700-hp water trucks (12,000 gal.)	2	2
275-hp motor graders	2	2
400-hp pugmill	1	1
250-hp clump truck	1	1
140-hp crawler tractor	1	1
140-hp compactor	1	1
105-hp crawler tractor	1	1
90-hp backhoe	1	1
200-hp utility truck	1	1
222-hp grader	1	1

in the lead agencies continuing efforts to fully disclose the potential cumulative impacts of the Eagle Mountain Landfill project, the application by Management & Training Corporation (MTC) for a Public Use Permit to operate, under contract with the California Department of Corrections (CDC), a 200-bed correctional facility to be known as the Joshua Tree Community Correctional Facility.

The proposed institution will be within the boundaries of the Eagle Mountain community, northwest of Desert Center, and be situated on approximately seven acres of land, located approximately one-quarter mile east of the existing MTC operated, 400-bed Eagle Mountain Community Correctional Facility. MTC intends to renovate the existing elementary school facilities and construct approximately 11,860 square feet of new buildings and a parking lot. Additionally, twenty abandoned houses within the Eagle Mountain community will be renovated to accommodate the additional MTC and CDC employees who will be assigned to the new institution.

The existing water, sewer, electrical, and natural gas utilities will be upgraded to meet current County standards. Kaiser Corporation will provide water to the site which is treated to meet California state water quality standards. The existing, Kaiser-owned and operated, sewer system which serves the Eagle Mountain community will also serve the new facility. The existing Kaiser Road will serve the traffic generated by the proposed facility. Even though this proposed action is not authorized or permitted by the discretionary actions addressed in the EIS/EIR for the Eagle Mountain landfill, the action would contribute to certain cumulative effects within the general project area (e.g., water use and consumption, traffic, growth, and services).

Page 587, Cumulative Projects, Regional Area. Another project which has been applied for after the draft EIS/EIR for Eagle Mountain landfill was released to the public is the Mesquite rail haul landfill project located in Imperial County. The application for this project was submitted on March 10, 1992, and completed on April 13, 1992.

As with the Eagle Mountain project, the Mesquite project is a Class III landfill involving the transport of up to 20,000 tons per day of nonhazardous municipal solid waste. The waste would originate from the metropolitan area of southern California including the counties of Los Angeles, Orange, Riverside, and San Bernardino. A maximum of five round-trip trains per day is proposed. The primary cumulative impact of the Mesquite project would be rail traffic because the project would use predominantly the same segment of the Southern Pacific rail line from the Los Angeles basin to the project site, a distance of approximately 220 miles.

The existing Southern Pacific rail line that is proposed for use by both projects has experienced traffic densities between 30 and 50 trains per day over the past 10 years. Traffic densities are now about 30-35 trains per day. The addition of an average of 10 trains per day (five round trips) for the Mesquite project is within the historic train traffic densities experienced in recent years. Furthermore, scheduling coordination between ongoing rail operations and any future projects which utilize the rail lines would be required to prevent conflicts in operation.

Because conflicts between ongoing regional rail operations and future operations utilizing the railways are not anticipated, no significant impact to rail operations is expected.

SECTION VII

RESPONSES TO PUBLIC COMMENTS

VII. Responses to Public Comments

During the public review period for the Eagle Mountain landfill project, 170 separate letters of comment on the draft EIS/EIR were received. Volume II of this final EIS/EIR contains all of these letters reproduced in full with a document identification number in the upper right-hand corner of each page of the letter. Individual comments within each letter are identified by marginal numbers indicating the beginning of the specific comment.

This volume (I) contains the responses to the comment letters. The responses are preceded by an index, which includes the document number, the person or agency who authored the comment letter, and the corresponding page number. Volume II also includes an index of the identification number for each letter and the name of the individual or agency who produced the letter of comment.

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DOCUMENT 0001 Report from Converse Environmental West, September 1991

1. For information purposes, the following discussion summarizes and illustrates the regulatory framework which applies to groundwater issues of the proposed project.

   The EIS/EIR identifies potential impacts and appropriate mitigation programs related to groundwater protection. As part of the preparation of detailed plans for the project, further additional work will be performed in order to select specific engineering designs for the project, implementing the mitigation programs identified in the EIS/EIR. The completion of this work is required as part of the existing regulatory framework for the application and approval of the operating permits for the project.

   The state regulations for the siting, design, and operations for the disposal of Class III solid waste to land are contained in Section 2533, Title 23, Chapter 15, of the California Code of Regulations. These regulations establish minimum criteria for the location and design of landfill disposal sites based upon the site characteristics and the type of waste that will be disposed of in the landfill. Factors that are considered by the RWQCB in their implementation of Chapter 15 include the depth to groundwater, the type and permeability of the material between the waste and groundwater, and the beneficial uses of ground and surface water that may be impacted by the waste disposal operation. The containment required by Chapter 15 is determined by geology, hydrogeology, hydrology, climatology, topography, type of waste, and other factors relating to the ability of the land disposal site to protect water quality. The federal regulations which establish minimum containment requirements for all municipal solid waste landfills and siting requirements regarding wetlands, airports, seismicity, unstable areas, and floodplains are located in 40 CFR 258.

   As an example of work required to secure all necessary permits under existing regulations, bedrock stability will be analyzed using rock mechanics analysis which will take into consideration bedrock faults, joints, and fracture patterns. For soil stability under static conditions, the Spencer's method will be combined with the computer program TSLOPE. For the dynamic condition, the equivalent acceleration method and the yield acceleration method will be used. Results from these studies will be used to define the precise construction techniques to establish stable foundations and structural fills, and to insure the stability of all landfill components and improvements.

   Tests of liner performance, accomplished through test pads at the site or in similar installations and in bench tests of the HDPE liner material, will be performed as part of the development of final construction plans and specifications. This work, and the resulting plans, will be components of the Report of Waste Discharge, Report of Disposal Site Information, and application for Authority to Construct. The designs and specifications generated through this work must be completed to the satisfaction of the Regional

Water Quality Control Board, County of Riverside Environmental Health Department, and South Coast Air Quality Management District, respectively, and comply with the Riverside County conditions of approval resulting from the EIS/EIR and Specific Plan process.

Construction, as well as operation of the project, will be a periodic activity throughout the life of the project. Thus, monitoring, testing, and design activities will occur on a regular basis. At each point as a subsequent phase of the landfill improvements is planned, the development plan review process at the County of Riverside and the review authorities cited above for other permitting agencies will insure conformance between the project and the applicable regulations.

2. This comment identifies no specific deficiencies in the draft EIS/EIR.

3. This comment recognizes that the undisturbed bedrock can support the weight of the landfill without adverse effect to the liner system and hence requires no further response.

4. The potential impacts represented by unstable cut slopes in the existing benches and other areas are described in the draft EIS/EIR (pages 480-481), as is the need to provide appropriate grading measures to ensure stability prior to constructing the landfill. Mitigation measures recommended in the draft EIS/EIR (pages 481, 484) include the removal of unstable material as part of the preparation of the subgrade prior to construction and the placement of engineered fill as part of the foundation and monitoring layer under the landfill.

   Previous stability reports (Dubois and Brummett 1958) prepared for the prior mining operation have been reviewed, and based on this data, the slopes of the site are considered stable. To comply with the Chapter 15 regulations, noted above in Response 0001-1, the final design of the landfill will include an evaluation of stability under static and dynamic conditions.

   Some of the existing walls of the East Pit consist of horizontal benches typically 40 feet wide and near-vertical faces typically 40 feet high. Thus, the overall slope of most of the wall area is approximately 1:1. The horizontal benches are sufficiently wide to allow access by heavy equipment which can be used to remove loose rock material that has accumulated. These benches also provide a working platform for equipment to remove unstable or fractured material in the vertical faces. Arm-mounted jackhammers can be used to batter slopes and remove loosened material that may not have fallen naturally, to create stable slopes. Drilling and blasting may be used in some selected areas if fractures or unstable conditions extend deeper and warrant these techniques. A foundation layer of structural fill will be placed under the entire landfill and against the side slopes as the landfill progresses upwards. This layer will serve to buttress the underlying material in side slopes, as well as to provide a base for the monitoring and containment layers under the landfill. In some areas, temporary measures such as drilling and rock-bolting may be used to hold outer layers of rock in place until they can be permanently stabilized.

5. Construction of the liner system will take place sequentially as areas of local instability are stabilized and to limit environmental exposure of the soil liner and flexible membrane liner (FML). The process of lining an area will typically consist of the following:

   a. Remove all loose material from areas to be lined.

   b. Geologically map the area to be lined and determine areas of local instability and adverse geologic conditions. (Note that this process must continue throughout the project since conditions will change over time.)

   c. Determine measures to stabilize slopes, based on the type and extent of instability. Typical measures are described above in Response 0001-4.

   d. Stabilize slopes using the determined method.

   e. Place foundation layer and composite liner system when a stabilized surface has been achieved.

   Lining of each subsequent bench will occur after waste has been placed to the former liner limits (next bench level). Intermediate cover over the waste cells will provide work space for permanent stabilization of the next upper slopes, construction of the subsequent liner system up the side slopes, and protection of the underlying landfill mass. Analyzed areas which have been geologically mapped and analyzed for stability will be assessed in conjunction with previously evaluated areas whenever possible to reduce the potential of zones of instability extending below previously filled areas. In the unlikely event that zones of instability (e.g., unstable fractures) are found to extend below previously filled areas then landfill material will be excavated to allow access to mitigate the unstable zone. Such excavations would be performed in accordance with applicable regulations.

6. This comment states a condition that is required by the RWQCB during the life of the landfill. It does not question the adequacy of the EIS/EIR; therefore, no additional response is necessary.

7. The draft EIS/EIR (pages 480-482) discusses the preparation of the subgrade prior to liner construction. This subgrade preparation will remove all material determined to be unstable during the final design. Differential settlement will occur, particularly between areas of compacted fill and bedrock, as in any land development and construction project. The degree of settlement in fill areas will be determined through the construction and

evaluation of several test pads. The amount of settlement will be determined and responded to in the final design of the landfill. Typical measures used to minimize and accommodate differential settlement include the use of overcompaction in some areas with long-term surcharges, selection of fill material, increased thickness of the clay liner beyond the minimum two-foot-thick specification, use of thicker sections of FML beyond the 60-mil minimum specification, and use of multiple layers of geotextile, soil, and liner to absorb stress and shear forces.

It is not necessary to remove all mine tailing and rock dump material if it is shown to be stable in the final design stability analysis. Laboratory and in-field testing will address the potential for hydroconsolidation of subgrade and fill materials.

8. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a layer of low-permeability soil with a maximum permeability of 10^{-7} cm/sec and a 60- to 80-mil high density polyethylene (HDPE) flexible membrane will be installed over the entire area underlying refuse. While this comment does not identify any deficiencies in the leachate collection system, during preparation of the preliminary ROWD, an engineering decision was made to design the leachate collection system using a blanket drainage system, rather than a series of interconnecting leachate collection pipes operating under a gravity system in the higher elevations and a pump system in the lower elevations as discussed in Section IV.F. of the draft EIS/EIR. These revisions have been incorporated into Section II.B.1 of the final EIS/EIR.

9. The revisions discussed in Response 0001-8 above obviate responding to this comment. A conceptual liner design is provided in Section II.B.1 of the final EIS/EIR.

10. Page 321 of the draft EIS/EIR concludes that the fine tailing material on site meets the regulatory requirements for a soil liner material. The need for an admixture, such as bentonite, will be evaluated as part of the liner test section testing. The amount of admixture, if any, needed to achieve the required permeability is expected to be minimal, and it is not necessary to locate another source of clay-like material to supplement the proposed liner material. This is discussed in Appendix C of the draft EIS/EIR, and the potential exhaust emissions related to this activity are discussed on page 375 of the draft EIS/EIR.

Desiccation/cracking characteristics of the liner soil will be studied during and after test pad construction by varying the thickness of the protective soil cover and other parameters of construction. In order to protect the clay liner from desiccation, its exposure will be limited by constructing small portions of the liner at a time. Moisture control during construction will be strictly monitored. Once in place, the clay liner will be protected by the FML, layers of geotextile fabric, a minimum of one foot of drainrock which is part of the leachate collection and recovery system, and a minimum of two feet of protective soil cover. The FML will inhibit moisture from leaving the clay layer and inhibit air from the landfill mass from entering it. Air circulation within the foundation layer below the soil liner will be prevented by sealing the FML at the upper limit of the liner system. Monitoring wells for this artificial vadose zone will also be sealed.

11. Potential liner/leachate incompatibilities could relate to (a) potential adverse effects on the soil liner from municipal solid waste (MSW) leachate, (b) potential adverse effects on the FML from MSW leachate, or (c) potential adverse effects on the FML from leachate from the soil liner. All three will be addressed.

    a. Even though calcareous content was not quantified, leachate compatibility tests have shown no changes on the liner permeability. GeoSyntec Consultants (1991) performed compatibility testing between liner material and landfill leachate in accordance with the requirements of the CCR, USEPA Method 9100, and American Society for Testing and Materials (ASTM) Method D 5084. This testing shows that the hydraulic conductivity of the fine-grained tailing material was not affected by the permeation of landfill leachate.

       Results from these compatibility tests are consistent with predictions from literature on the properties of soil liners. Excerpts from literature are summarized below:

       > By their very nature most clay soils are quite stable materials in their natural state, because they are towards the end point of the degradation phase of the weathering cycle. Thus, if a naturally occurring clay soil is compacted to high density, thereby producing a material with very low hydraulic conductivity, and is maintained within the same ranges of temperature, pressure, and chemical and biological environment, it would be expected to function well as a seepage barrier indefinitely (Mitchell and Jaber 1990).
       >
       > Studies have shown that no detrimental effects were observed when a wide range of actual and simulated landfill leaches was passed through specimens of natural earthen liner material. In fact, there were two positive benefits: (1) some of the leachates caused a gradual reduction in the permeability of the clay (in some cases to the point where the clay was practically impermeable); and (2) the leachate passing through the clay was chemically filtered by the soil such that the amount of hydrocarbon material coming out of the test specimens was far less than the amount going into the specimens (Daniel and Liljestrand 1984).

    b. and c. The FML will be constructed of high density polyethylene, which is the most chemically resistant material now used for the production of geomembranes. Studies have established that HDPE is very durable in many different environments

(Albertsson and Banhidi 1980; Moakes 1986). The lack of ultraviolet light, elevated temperatures, and oxygen at the bottom of a municipal solid waste landfill precludes significant oxidation of HDPE in that environment. Also, since municipal solid waste landfill leachate contains only trace to very low concentrations of organic solvents, significant swelling or dissolution of HDPE geomembranes would not occur.

The conclusions given above on the durability of the HDPE geomembranes is supported by the scientific community at large. For example, in 1988, the USEPA Hazardous Waste Engineering Research Laboratory (WERL) convened an expert committee for the "Ad Hoc Meeting on the Service in Landfills of Flexible Membrane Liners and Other Synthetic Polymeric Materials of Construction." The published conclusions of the group of experts included the following (Haxo and Haxo 1988):

- "The basic conditions to which polymeric FMLs (flexible membrane or geomembrane) and other components of a liner system are exposed in both MSW (municipal solid waste) and hazardous waste landfills include comparatively low ambient temperatures, lack of light, moisture, aerobic and anaerobic atmospheres depending on the component of the liner system and the location within the fill, and low concentrations of dissolved constituents. Thus, polymeric materials placed in service in liner systems do not encounter the type of conditions that are normally considered to cause degradation of the base polymeric resins."

- "The polymers that were discussed and first-grade compounds based on these polymers should maintain their integrity in landfill environments for considerable lengths of time, probably in terms of 100's of years."

It is also useful to consider the results of tests in which HDPE geomembranes were submerged in leachate and the effects of submergence on geomembrane properties were evaluated. For example:

- A laboratory study was conducted to determine the resistance of liner materials to attack by municipal solid waste leachate (Haxo et al. 1985). The materials (including polyethylene) were exposed to leachate for up to 56 months. Various mechanical and dimensional properties were monitored throughout the test duration. Swelling of the polyethylene after exposure was insignificant and the physical properties of the test specimen after exposure were within the range of normal variability in properties before exposure.

- Tests to evaluate chemical compatibility of HDPE geomembranes with an industrial waste leachate were conducted for up to one year (Dudzig and Tisinger 1990). The geomembrane was submerged in leachate at both the laboratory and in a collection and removal sump located at the landfill. The leachate contained high levels of metallic salts, low concentrations of organic solvents, and some petrochemical waste, such as oil. The HDPE geomembrane was tested in accordance with EPA Method 9090, except that the geomembrane was exposed to leachate for longer durations (i.e., up to one year), and microstructural properties (crystallinity, composition, oxidative stability, and molecular structure of the HDPE surface) were monitored in addition to the requisite dimensional and mechanical properties. The HDPE geomembrane did not degrade to any measurable extent due to exposure in either the laboratory or sump.

- Some leachates contain minor amounts of petrochemical waste, such as motor oil, diesel fuel, gasoline, and kerosene. The effect of such constituents in highly concentrated form has been found not to have a long-term effect on HDPE (Wrigley 1989). For instance, HDPE is used for automotive fuel tanks (Modern Plastics Encyclopedia 1990).

- Tests have also been performed on HDPE geomembranes to evaluate their properties after they were submerged in municipal solid waste leachate for up to 120 days at temperatures up to 50 degrees Celsius. The tests were performed in accordance with EPA Method 9090 using leachates from 10 different landfills. No evidence of degradation due to submersion of the HDPE geomembrane in any of the 10 leachates was found.

12. See Response 0001-45.

Flexible membrane liners have been shown to have a low gas conductivity. At a pressure difference of one atmosphere, the equivalent conductivity of an HDPE to methane gas is less than 1×10^{-4} cm/sec. As the pressure difference decreases, the conductivity decreases greatly—to approximately 1×10^{-7} cm/sec at a pressure difference of 1 mmHg. In fact, HDPE FMLs are commonly used as protection against the buildup of landfill gas in inhabited structures located on or near landfills. The installation of the proposed composite liner, together with the proposed LFG collection system, monitoring program, and remediation activities (if necessary) should mitigate to a level of insignificance potentially adverse impacts to groundwater quality resulting from LFG.

It is possible under normal conditions that areas within the landfill mass may reach temperatures on the order of 160 degrees Fahrenheit while the geologic formations surrounding the landfill will more typically be at temperatures on the order of 60 degrees Fahrenheit. This will create a temperature gradient between the waste mass and the surrounding geologic formations, with the surrounding geologic formations, drainrock, and protective soil cover over the liner system all acting as a heat sink. At the composite liner, temperatures will be lower than the maximum temperatures in the waste mass, and below temperatures that would degrade the ability of the composite liner to act as an effective barrier. A discussion of impacts and mitigation from landfill fire potential is presented in Response 0001-45.

13. Compression by the overlying landfill mass will serve to further compact the soil liner, improving its ability to retard any leachate that might reach it. The comment implies that the liner system would be constructed directly on the surface of benches and side slopes, which is not true. See Responses 0001-5, 7, and 10 for a discussion of the subgrade treatment and liner installation. Performance of the HDPE liner would not be significantly altered by uniform pressure. In areas of differential pressures, various design responses may be used. These include rounding or battering the edges of side slopes; ramping the bench to match more nearly adjacent slopes; varying the thickness of the foundation layer, clay layer, HDPE, and/or protective soil layer; using multiple layers or other reinforcement measures in specific locations; and varying the design cell size in some perimeter portions of the landfill. As noted above (Response 0001-7) test pads will be constructed and evaluated as part of the final landfill design.

14. The draft EIS/EIR assumed a range of leachate chemical composition which was considered in the leachate treatment system preliminary design. A general range of inorganic constituents is presented in the hydrogeology and water quality appendix (Appendix C:Table 8) and was drawn from four separate literature summaries. For the liner compatibility tests (GeoSyntec Consultants 1991), sample leachate from a Los Angeles County landfill was used. Rather than rely on literature values or similar samples, the exact composition of leachate (if any) will be determined by chemical analysis of each batch of leachate, prior to treatment. The current design includes provisions for adding treatment processes to address any constituent that may have to be removed from the leachate prior to using it for dust control. The full range of treatments available at the landfill site will include sedimentation for removal of solids and particulates, oil/water separation for the removal of oily phases that may occur; stripping of VOCs that may be present in the leachate/condensate; and tank storage of treated water. Untreated and treated liquids will be stored in appropriate tanks until ready for use or disposal. An alternative method of handling leachate/condensate will be to collect and store it for off-site treatment and disposal. All appropriate regulations for the handling of hazardous materials will be observed. See Response 0001-11 for further discussion.

15. The estimate of leachate generation used in the draft EIS/EIR is based on use of the EPA Hydrologic Evaluation of Landfill Performance (HELP) model and conditions expected for the Eagle Mountain landfill (draft EIS/EIR, page 318). This estimate concluded that no leachate would be generated. This conclusion was confirmed independently by Ham

(1990:1). For purposes of designing the leachate collection system, however, an estimate of 13 gallons per acre per day was developed based on leachate generation from landfills in Los Angeles County. This design estimate of leachate production for the project is overly conservative because it does not account for a reduction in moisture content resulting from the waste compaction and handling operations or the extreme dryness of the Eagle Mountain site. The LCRS is designed to handle twice the volume of leachate estimated for design purposes. For design purposes, the leachate flow rate for the entire site has been estimated to be 20 gallons per minute. Each leachate collection system proposed at the site (one per phase of development) is designed with a capacity of 120 gallons per minute. This results in a sizable factor of safety for an already conservative design quantity.

16. This comment does not identify any deficiencies in the leachate collection system. An engineering decision was made, however, to plan the leachate collection system using a blanket drainage system rather than a series of interconnecting leachate collection pipes operating under a gravity system in the higher elevations and a pump system in the lower elevations as discussed in Section IV.F. of the draft EIS/EIR.

17. Although the draft EIS/EIR states that wastewater may be disposed of at the Kaiser Wastewater Treatment Plant, current plans expect to collect and transport the leachate to an appropriate off-site disposal facility or use all leachate and most wastewater for dust control, after appropriate on-site treatment. The only wastewater going to the Kaiser treatment plant will be the sanitary sewage from the existing on-site buildings and sanitary sewage from new buildings. The Kaiser treatment plant is an existing facility that is permitted by the RWQCB for treating and disposing of treated sewage effluent that is generated at the site. The project does not propose to discharge sewage to the treatment plant in volumes that would cause the permitted capacity of the treatment plant to be exceeded. Therefore, there is no change in the Kaiser treatment plant operations that needs to be evaluated as part of the discretionary actions for this project.

    For the leachate collection system, initial treatment capacity for approximately 15,000 gallons per day is currently planned with the use of a modular portable batch plant system. This system would treat both leachate and any LFG condensate that would be collected. With current estimates of leachate and the estimate of ultimate potential LFG condensate of 11,500 gallons per day (draft EIS/EIR, page 336), it would be necessary to have possibly three modules or portable batch treatment plants to provide adequate treatment for reuse of the leachate and LFG condensate. These treatment plants would be operated following closure of the landfill. Treated effluent would be used for dust control and irrigation during postclosure maintenance activities. Excess treated effluent may be discharged through a wastewater treatment plant, if necessary. The treatment plant will be operated according to waste discharge requirements mandated by the RWQCB, which will mitigate potential adverse impacts on the beneficial uses of area water resources.

18. Significant quantities of leachate are not anticipated to reach the fractured bedrock beneath the site, because of the proposed composite liner, the leachate collection removal system, the proposed proper operation of the leachate and gas collection systems, and the dry climatic conditions and waste characteristics that will exist at the site. Nevertheless, in accordance with regulations, the ROWD must address potential leachate releases, include a remediation plan, and present a financial mechanism to cover possible costs.

19. No responses are necessary to this comment. Appropriate responses are provided in Responses 0001-44 to 56 regarding landfill gas and gas condensate.

20. The mitigation measures for potential drainage impacts shown in Table S-2 "Drainage" in the draft EIS/EIR incorrectly state: "slope final landfill not greater than 3 percent." The revised table deletes the word "not." This change appears in on the revised summary table located in Section II.G. of the final EIS/EIR. The slopes in the final grading plan are greater than three percent to prevent the ponding and infiltration of rainwater. On the upper surfaces of the finished landfill, slopes would generally range from 3-10 percent. Erosion control measures will be developed, such as vegetation and using larger rocks in the final cover layer, as a means to protect the surface from erosion damage. Additionally, a closure plan that provides for the maintenance of the final cover and the repair of eroded areas is required as part of the RWQCB permitting process. This plan includes procedures for periodic inspection of the cover, and additional inspections after major storm events to ensure the integrity of the cover.

21. The conclusion cited in the draft EIS/EIR (page 251) was that the age of faulting across the property had not been evaluated in past literature. As part of the investigations for the draft EIS/EIR, it was noted (page 249) that the major fault zone crossing the landfill footprint did not offset Quaternary alluvium. A subsequent report by Dr. Richard Proctor titled "Evaluation of Active Faulting at Eagle Mountain" evaluated existing data and concluded that there is no evidence of Holocene movement of any of the fault traces on-site.

22. This comment misinterprets the word *immediately*. To avoid confusion, this comment reflects that the removal of loose material and grading to provide necessary surface stability will be performed on all benches from which materials could conceivably fall onto working areas and not be limited to benches immediately above the working areas.

23. See Responses 0001-3 to 6 above. The recommended stability analysis is required as part of the RWQCB permitting process.

24. The landfill will be designed to withstand the maximum probable earthquake without damage to the foundation, fill slopes, or structures which control leachate, gas collection,

or surface drainage. That is, all structures will be designed to withstand 0.2 g. Pit slopes will be scaled of loose rocks prior to construction of the liner.

25. MRC proposes a series of measures working in conjunction with each other to protect the area's groundwater resources. This series of measures is designed to accomplish three basic goals: (a) leachate and gas minimization; (b) leachate and gas containment; and (c) leachate and gas collection and removal. These mitigation measures are described in the draft EIS/EIR on pages 320-323. In the event groundwater recovery becomes necessary, a corrective action program, including pumping of extraction wells to remove the groundwater, will be implemented in accordance with current regulations.

    Leachate and gas generation will be reduced by the installation of the final cover system (which is intended to control infiltration of rainfall into the landfill), gas recovery system (which will extract gas and moisture from the landfill and dry the waste), operational practices (daily and intermediate cover, waste sorting, and restrictions against liquids and sludges, i.e., the dry condition of the refuse that will be disposed at Eagle Mountain), and the arid climate in the site region. As a result of these controls, there will be very little leachate at Eagle Mountain, as experienced at other southern California landfills.

    Leachate and gas containment is achieved by the composite liner system. A composite liner (i.e., a geomembrane placed directly on top of a layer of low-permeability soil) is more effective than either a geomembrane alone or a low-permeability soil layer alone for containing leachate and gas (Daniel 1990; Giroud and Bonaparte 1989b; USEPA 1987).

    Leachate and gas collection is achieved by the leachate collection system, the composite liner, and gas recovery system. Furthermore, USEPA studies (USEPA 1987) have shown that placement of a geomembrane (as opposed to a layer of low-permeability soil) below a drainage layer maximizes the collection efficiency of the layer. The leachate collection system is designed to reduce liquid buildup on the liner, even under maximum flow conditions.

    The artificial vadose zone (foundation layer) directly underlying the liner and vadose zone monitoring wells will be used to detect leachate and gas emissions. In addition, groundwater detection monitoring wells will be installed at the perimeter of each phase of landfill operations and for the landfill as a whole as required by Title 23, Chapter 15, Article 5 of the CCR.

    The RWQCB, pursuant to Chapter 15 requirements, is requiring the project proponent to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for a reasonably foreseeable release from the landfill. This requires an estimation of leachate that could reasonably be expected to leak from the landfill containment system, an estimation of the impact to water quality that could result from such a leak, and an estimate of the cost to implement a corrective action program to ensure protection of the beneficial uses of the water. This financial assurance for the cleanup of an estimated leak must be completed and discussed as part of the final landfill design even though leachate is not expected to leak through the landfill containment system.

In summary, given proper implementation and successful operation of all of the design and operating controls described above, the Eagle Mountain landfill will not have a significant adverse impact on the beneficial uses of groundwater.

26. The draft EIS/EIR acknowledges in several places (pages 58, 59, 318, 319, 335, 336) that only small quantities of leachate will be generated. The four sources of leachate are also discussed in the the draft EIS/EIR.

27. See Response 0001-15, above. Minor reductions in field capacity of the landfill mass due to settlement would not alter the design assumptions used in the leachate control and recovery system.

28. Several design measures would prevent any adverse effects of temporary hydrostatic pressure from localized groundwater mounding and seepage. The foundation layer will provide a capillary break between the liner and bedrock side slopes. Also, in the unlikely event that the groundwater level may rise to the bottom of the landfill, the foundation layer will provide a capillary break from which the water may drain by gravity or be pumped out. A separation of at least approximately 50 feet will also be provided between the lower levels of the landfill liner system and the historic high groundwater level.

29. Response 0001-28 above clearly explains that there will be a “capillary break” between the liner and the outside materials, thus draining fluids away and preventing any rise in the fluid levels from the outside.

30. See Response 0001-15 above.

31. See Response 0001-28 above.

32. This comment essentially describes the generation of landfill gas condensate, which is described with different language in the draft EIS/EIR (pp. 143-144). The presence of condensate is taken into account both in the design of the LFG collection system and in the leachate treatment system.

33. Given proper implementation and successful operation of all the proposed design and operating controls, the Eagle Mountain landfill will not present a significant adverse impact on the beneficial use of groundwater. Calculations as suggested by the comment

are required as part of the RWQCB permitting process, in order to estimate potential costs of remediation and to establish assurances of financial responsibility. See also Response 0001-25 above.

34. The conclusion that significant impacts will be avoided is not primarily based on the estimated migration rates of groundwater through fractured bedrock. It is based on the fact that little or no leachate will be produced and on the design measures included in the project.

35. Depending on the physical conditions, migration paths may also be blocked by fault and fracture zones. Under well-understood circumstances, tracer tests may be warranted; however, the arrival of a tracer indicates only its own history along a particular path and may not be representative of general conditions. Other direct tests involving pumping of wells and hydrogeologic observations and calculations are effective, given the opinion that this is an area of extensive interconnecting fractures. In any case, the draft EIS/EIR clearly identifies the potential for groundwater contamination and describes design features which will reduce the potential groundwater impacts to below a level of significance.

36. This issue does not significantly affect the conclusion of the draft EIS/EIR or the design of the containment system. The understanding of the groundwater movement is important for the design of an adequate monitoring system that will detect leakage from the landfill at the earliest possible point.

37. This comment refers to a sentence on page 320, second paragraph, of the draft EIS/EIR. Clarification of the sentence is acknowledged by eliminating the phrase "found further to the east and thus facilitating formation of a groundwater divide near the bedrock/alluvium interface."

38. At this time, the groundwater observed is not being diverted to the south at the north-striking feature referred to in this comment. Mitigation for groundwater contamination is discussed in the draft EIS/EIR on pages 322-323. A system of detection/monitoring wells will be installed with their location subject to the approval by the RWQCB, including deep wells in bedrock.

39. Page 337, second whole paragraph, last sentence. Delete the word "remote," so the sentence reads: "There is a possibility that some of the LFG could migrate through adjacent soils away from the landfill mass."

40. The generation characteristics cited in the draft EIS/EIR represent a reasonable assumption so that the impacts of LFG can be evaluated and mitigation measures employed. The draft EIS/EIR presents methods for LFG monitoring, collection, and treatment and

concludes that these measures will reduce LFG emissions to levels of insignificance. If less LFG than predicted is generated, the control system will have overcapacity. If more, additional units for control will be installed. LFG condensate will be similarly handled. The alternative exists to collect and temporarily store leachate/condensate in tanks on-site for proper treatment and disposal at an off-site facility. Control of LFG emissions is required by the SCAQMD.

41. The draft EIS/EIR discusses perimeter landfill gas monitoring in the mitigation of landfill gas impacts. "The LFG control system will also consist of a series of gas migration probes placed around the perimeter of the site to detect off-site gas migration. Probe spacing and depth will conform with SCAQMD and CIWMB guidelines (70-3)." Also, "A network of five to six monitoring wells would be placed on approximate 1,000-foot centers in soils along the northern town perimeter. Other permanent subsurface LFG monitoring wells or detectors/alarms will be placed near structures in the immediate vicinity of the East Pit (337)."

42. The draft EIS/EIR discusses wastewater disposal on pages 41, 65, and 529-530. As noted above in Response 0001-17, only sewage from the main office area will go to the Kaiser treatment plant and no changes to the permitted capacity or treatment method are required for the project. This facility treats wastewater from the town of Eagle Mountain, which at the time the mine was operating contained up to 3,000 residents. The plant has a physical design capacity to treat 180,000 gallons per day (gpd) and is currently permitted to discharge 35,000 gpd. Current flows through the plant are estimated at 10,000-15,000 gpd. See Response 0001-17 for additional discussion.

43. Total annual groundwater consumption by the project is estimated to be approximately 2,000 acre-feet (draft EIS/EIR, page 328). Annual recharge into the Chuckwalla Valley groundwater basin is approximately 12,000 acre-feet (draft EIS/EIR, page 139). If there were no other activities using groundwater within the basin, the use by the project would not be significant. In the context of other uses, however, a significant impact will occur. The most recent estimate of groundwater withdrawals indicates that approximately 23,000 acre-feet per year are being used out of the Chuckwalla Valley (draft EIS/EIR, Table 9). Thus, the impact of groundwater withdrawals is considered significant (as noted in the draft EIS/EIR, page 589).

The following changes clarify these points.

In the draft EIS/EIR, page 329, the third and fourth paragraphs, should read:

Mitigation

Certain features of the project (reusing treated wash water and surface runoff which comes in contact with refuse for dust control) would reduce the total consumption of groundwater, but would not eliminate the effect of the project.

Significance After Mitigation

Groundwater consumption by the project, in light of the overdraft conditions in the Chuckwalla Valley, is considered significant.

On page 589, the third paragraph should be deleted and replaced with the following:

Due to regional consumption, the groundwater in the Chuckwalla Valley is expected to remain in an overdraft condition for the reasonably foreseeable future. Past use by Kaiser Steel ranged from 3,500 to 4,000 acre-feet/year, which was consumed annually from the mid-1960s through 1979 (see page 139). Estimates of recent use for the northwestern portion of the Chuckwalla Valley are presented in Table 9. The total annual groundwater withdrawal from this area of approximately 23,000 acre-feet was distributed as follows:

Use	Acre-feet/year
Agriculture	22,040
Lake Tamarisk	865
Other Domestic	50
Gas Company	5
TOTAL	22,960

Annual recharge into the northwestern portion of the Chuckwalla Valley is estimated to total 12,240 acre-feet (also on page 139). Maximum consumption by the project is estimated to be 1,972 acre-feet/year (page 328), plus another 163 acre-feet/year that would be an indirect effect due to increased population attributable to the project. Using these numbers, the cumulative rates of overdraft, with and without the project, are 12,855 and 10,720 acre-feet/year, respectively. The discussion on page 328-329 attempts to place these values in perspective by estimating the remaining lifetime of the aquifer. Because the estimates of total usable water reserves in the Chuckwalla Valley vary greatly, and because the past patterns of well drawdown are erratic (see page 141 for a discussion of both of these topics), this determination of the remaining useful life of the aquifer is fraught with uncertainty. It is safe to assume, however, that the overdraft condition in the Chuckwalla Valley will continue and cumulative impact will remain significant.

44. The draft EIS/EIR, in Section IV.A. ("Environmental Consequences - Water Quality and Use," page 322) states: "Migrating LFG that contains volatile organic compounds can be a source of groundwater pollution." Table S-2 should have included LFG migration in addition to the leachate migration cited under the impact section. However, this oversight was corrected in the cited mitigation measures section, which calls for the installation of an LFG collection system as one of the measures proposed for the mitigation of potential groundwater degradation. LFG migration has been included as a potential impact (see summary table located in Section II.G. of the final EIS/EIR).

    The design of the landfill has been changed in response to comments, to include a composite liner over the entire landfill area. The installation of a composite liner consisting of a layer of low-permeability soil and a flexible membrane liner, together with the proposed LFG collection system, monitoring program, and remediation activities (the latter if necessary), will mitigate to a level of insignificance any potentially adverse impact to water quality resulting from LFG.

45. As part of the LFG control and recovery system operations, there will be regular monitoring of each methane detection well and probes in the system. The monitoring of the wells will include measurements of gas concentrations and temperatures.

    The commenter is correct in noting that landfill fires can be a direct result of LFG collection. The potential for landfill fires is highest at points where outside air may be drawn into the landfill mass. For the proposed project, these points would be near the perimeter liner system and at LFG monitoring and extraction wells. In the event a fire involves material near the liner itself and damage to the liner, then additional impacts related to the release of LFG could result. Several measures are incorporated into the project to reduce potential impacts from fires to an insignificant level. These measures include the placement of several feet of earthen material between the HDPE liner and the refuse mass itself, a specification that LFG extraction and monitoring wells would be located a minimum distance of 80 feet from the liner, and the regular monitoring of temperature and the composition of gasses noted above. In the event of a subsurface fire, various control measures (discussed on page 142 of the draft EIS/EIR) are available which would reduce impacts to an insignificant level. Among these is the temporary adjustment of the collection system to reduce the LFG extraction rate within the area of the fire to reduce the oxygen supply. It is feasible, however, that this action could cause an increase in potential LFG emissions due to a temporary increase in the pressure gradient between the landfill mass and the surrounding natural materials. However, this would be mitigated by the installation of additional monitoring probes in the immediately surrounding natural materials (vadose zone) to detect any LFG emissions and, if necessary, the installation of LFG extraction wells to reduce escaping LFG.

The public health impacts for this project from toxic combustion products and explosion potential are minimal.

46. Collection system efficiencies as high as, or or even higher than, 80 percent have been attained in unlined and uncapped landfills. The Eagle Mountain landfill will be lined with a composite liner of clay and HDPE liner materials and capped. Under these conditions, higher efficiencies can be expected. An 80 percent collection efficiency is a conservative estimate used for design purposes. This increased efficiency afforded by the lining and capping will reduce the potential impacts associated with LFG migration. See Response 0001-45 regarding landfill fires impact and mitigation.

47. The decrease of LFG emissions in the Los Angeles area due to transport of waste out of the area and the reduction of stack gases generated close to a large metropolitan area are discussed in Appendix E of the draft EIS/EIR under the sections titled "No Project" alternative (pp. 189-198) and Comparison of Alternatives (pp. 198-210). The comparison of alternatives indicates that the Eagle Mountain project, with the recommended mitigation, will result in an increase in emissions of all pollutants (except carbon monoxide, for which there will be a decrease), compared with the "No Project" alternative under which there would be a continuation of waste disposal in landfills within the South Coast Air Basin.

    Looking solely at impacts within the South Coast Air Basin, the Eagle Mountain project, with the recommended mitigation, is expected to result in no change or in a decrease in emissions when compared with the "No Project" alternative. Thus, the increased emissions associated with transportation of wastes within the basin is offset by the decrease in emissions from the transfer of flares and landfill operations to the desert location. On the basis of population exposures to air pollutants, the Eagle Mountain project, with the recommended mitigation, would result in a net benefit due to the relocation of emissions from the heavily populated South Coast Air Basin to less populated desert areas.

    However, given the sensitivity of desert residents to the air quality issue, an assessment of air quality changes on a population-weighted basis will not necessarily provide a reasonable basis for evaluating project impacts.

48. An assessment of the emissions associated with impacts of LFG combustion in the Eagle Mountain area is included in Appendix E of the draft EIS/EIR on pages 81-84. The effect that these emissions have on air quality in the Eagle Mountain area is discussed in Appendix E as well (pp. 92-97) and analyzed in the Air Quality section of the draft EIS/EIR.

49. This commenter acknowledges the conservatism of using an 80 percent landfill gas collection efficiency. The revised health risk analysis dated February 1992 also used an 80 percent landfill gas collection efficiency and a 99 percent flare destruction efficiency; however, this revised risk assessment used on-site meteorological data and updated unit risk values. As such, the dispersion model can calculate annual concentrations directly, which typically produces lower concentrations than those determined by using screening meteorological data as used in the draft EIS/EIR. The emission rates for toxic substances were based on the concentrations found in landfill gas from four southern California landfill sites and used the highest concentrations of each pollutant to estimate the worst-case health risks and the average concentration of each pollutant to calculate the most probable health risks. The revised risk assessment is contained in Attachment 9, Appendix M of the final EIS/EIR. The maximum cancer risk is estimated to be 2.2 in 1 million at maximum concentrations of trace contaminants and maximum gas production (see Table 9-2). The most probable cancer risk is estimated to be 1.0 in 1 million, when the average concentrations are used with the maximum gas production (see Table 9-3). South Coast Air Quality Management District Rule 1401 provides that a project may be approved if the project uses best available control technology for toxics and the cancer risk does not exceed 10 in 1 million.

50. See Response 0001-49 above.

51. Figures 28 and 29 of the draft EIS/EIR provide a conceptual plan for the LFG collection system. Where horizontal gas trenches are used, the trenches will be placed below the intermediate cover layers in gravel-filled trenches. At the collection and removal locations, the condensate can be collected in storage tanks before being properly disposed of at approved off-site disposal facilities.

52. This comment relates to the final design of the LFG collection system and will be addressed at that time.

53. The LFG collection system will be designed to mitigate any effects on the system caused by differential settlement of the landfill waste.

54. Changes in the text of the draft EIS/EIR (page 335, second paragraph, third sentence) to recognize the uncertainties in LFG generation rates have been made to read: By the year 2092, the daily generation rate is expected to be approximately 80 million cubic feet per day. Estimates of LFG production are uncertain, however, and actual results could be substantially higher as well as substantially lower. The comments provide a rationale for the recommendation that a flexible membrane liner be installed to control gas migration. This flexible membrane liner is now part of the design for the landfill.

Additionally, any LFG collection system is a dynamic system that must be frequently adjusted to account for the actual conditions that exist in the landfill. These changes are made as a result of the data collected by the proposed system. For example, if gas concentrations are increasing in any given probe, then additional extraction wells may have to be installed in that area.

55. Table FEIR-AQ-13, located in Appendix M, Attachment 2 of the final EIS/EIR, summarizes the results of six source tests on landfill gas flares. As the commenter notes, the destruction efficiency can vary among different compounds. However, the test results demonstrate that an efficiency of 99.0 percent or greater can be achieved on all compounds tested. Because the Eagle Mountain project will use best available control technology, it is likely that the 99 percent destruction efficiency will be maintained on a long-term average basis. Compound-specific destruction rates are provided in Section V.B.3., Table FEIR-AQ-13, located in Appendix M, Attachment 2 of the final EIS/EIR. The conclusions regarding health risks associated with the project are not affected by this refinement because the analysis of risks is dominated by the portion of landfill gas which is assumed to escape through the surface and not by that which is disposed of through the flare.

56. The draft EIS/EIR incorrectly refers to the 0.3-second residence time in the Project Description section. The reference to this requirement in Appendix E correctly refers to the 0.6-second retention time required by the SCAQMD.

57. The federal Clean Air Act Amendments of 1990 will have no significant effect on the proposed project. This is due to the fact that the project is within the jurisdiction of the SCAQMD, which has established requirements far more stringent than those imposed under the new federal amendments. While some changes to the SCAQMD permit program may result from the new federal law, these changes are expected to be procedural, not substantive, in nature. No changes to the assessment of project impacts, or expected compliance with applicable regulations, is necessary as a result of the passing of the 1990 federal Clean Air Act Amendments.

    The SCAQMD's New Source Review rule (Regulation XIII) was amended in June 1990 to drastically reduce the "trigger" levels for emissions offsets. This revised rule was discussed in the draft EIS/EIR (which was prepared after the rule's amendment) in Appendix E, pages 55 and 102-105. The revised offset levels are also reflected in the assessment of significance discussed, for example, in Appendix E on pages 139-146. The older significance criteria were incorrectly shown in the Discussion of Significance Criteria in Appendix E on pages 61-69; however, these older criteria were not used in the analysis. Corrected copies of Tables 14-18 from Appendix E of the draft EIS/EIR are included in Appendix M, Attachment 1 of the final EIS/EIR.

The *Kings County Farm Bureau v. the City of Hanford* court decision was reviewed prior to the preparation of the draft EIS/EIR, and the document complies with the guidelines set down in that decision. The draft EIS/EIR reflects the points discussed in the comment:

The nonattainment status and existing air quality of the areas impacted by the proposed project are explicitly recognized and taken into consideration in evaluating the significance of air quality impacts; see, for example, Appendix E, pages 139-146.

The emissions from the on-site stationary sources are analyzed concurrently with the mobile source emissions; see, for example, Appendix E, page 132, and the associated discussion of significance which reflects the combined emissions from stationary and mobile sources.

There have been no changes to the SCAQMD's BACT Manual which would affect the conclusion in the draft EIS/EIR that baghouse controls will be required as BACT for the cover processing plant.

The requirements of the SCAQMD Rule 431.1 were discussed in the draft EIS/EIR in Appendix E, on page 56 and again on page 102. The rule was adopted prior to the preparation of Appendix E, and the adopted version was reviewed in the draft EIS/EIR. The rule would limit the sulfur content of landfill gas fired in flares or sold for use off-site to not more than 250 ppm calculated as hydrogen sulfide. The data contained in the draft EIS/EIR (Appendix E, page 83) regarding emissions from flares indicate that the highest reported sulfur content from landfill gas in the South Coast Air Basin is less than 60 ppm. This rule includes a more rigorous restriction of sulfur content in the landfill gas fired in flares which will apply to the project as of 1993. This and other rules and regulations (such as Rule 403 dealing with fugitive dust) may be expected to be strengthened in the future. The project will be required to comply with all applicable future rules and regulations.

58. The collection of on-site air quality and meteorological data was begun as soon as it became clear that collection of such data was necessary. In order to ensure that the data were collected in a manner acceptable to both the SCAQMD and the EPA, a monitoring protocol had to be prepared, submitted to the agencies, and approved before data collection could begin. Included in Attachment 7, Appendix M of the final EIS/EIR are summaries of meteorological data collected on-site and summaries of ambient air quality monitoring data collected on-site. Revised air quality modeling using the actual weather and ambient data collected on-site has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. The results of the revised modeling show that, as anticipated in the draft EIS/EIR, project impacts will not exceed federal Class I and II increments and will not exceed either federal or California ambient air

quality standards for CO, NO_2, and SO_2. Project impacts alone for PM10 are well below federal and California ambient air quality standards. However, the highest background ambient values measured on-site exceed the 24-hour average PM10 federal and California standards. Therefore, when project impacts are added to the maximum measured background levels, the resulting cumulative impacts would exceed 24-hour average federal and California PM10 ambient air quality standards.

59. Control measure D-2 in the Air Quality Management Plan involves hauling biodegradable waste out of the South Coast Air Basin. The detailed description of the control measure (contained in Appendix IV-A of the AQMP) suggests that this measure would be accomplished in conjunction with electrification of the railroad system in the South Coast Air Basin. It is acknowledged that there are secondary benefits from the project, i.e., reductions in LFG emissions in the SCAB, and potential reductions in transport vehicle emissions within the SCAB. These emission reductions, however, are not sufficient to fully compensate for the increases caused by the project. Therefore, the conclusion that the project would have a significant regional air quality impact would not change.

60. See Response 0001-58 above. The meteorological data collected on-site is reflected in tables which show the wind speed and direction (see Attachment 7, Appendix M of the final EIS/EIR).

61. Air quality trend charts and other information will be updated as the project progresses, but the conclusions of the report are not changed.

62. The comment relating to the diversity in air quality patterns is correct; the draft EIS/EIR showed the trend in worst-case pollutant concentrations at any location in the Southeast Desert Air Basin. While pollutant concentrations tend to decline in more remote areas of the desert, the use of the more severe concentrations from stations close to the exit of the Southeast Desert Air Basin results in a conservative setting upon which project impacts are evaluated. However, on-site monitoring data has been collected for the site and has been used to refine the conclusions regarding project impacts at the site. This analysis is included in the final EIS/EIR (Attachment 8 of Appendix M).

63. See Response 0001-62 above.

64. The commenter's conclusions are consistent with the summary of on-site air quality data presented in response to a previous comment.

65. The comment is correct with respect to air quality at the Eagle Mountain project site; however, as discussed in the draft EIS/EIR (see Appendix E, page 132, for example), most of the emissions of several pollutants associated with the project occur in areas of the South Coast and Southeast Desert air basins, which are more subject to the influence

of urban pollution. For example, the data in Appendix E indicate that the following fraction of mitigated project emissions occur in the South Coast Air Basin and along the transport routes, rather than at the Eagle Mountain site itself:

71 percent of NOx emissions
62 percent of CO emissions
23 percent of PM10 emissions
38 percent of VOC emissions
77 percent of SOx emissions

66. The air quality appendix to the draft EIS/EIR (Appendix E) contains a more extensive discussion of the significance of project impacts and of the comparison between project alternatives (including the "No Project" alternative) than what was presented in the main body of the draft EIS/EIR. It is unclear from this comment what additional air quality benefits of the project have been overlooked.

67. It is not clear that there are any air quality-related economies of scale associated with the Eagle Mountain project, except to the extent that a new, larger project will use more modern equipment and will provide mitigation that existing facilities would not need to provide. These two factors are reflected in the comparison, contained in the draft EIS/EIR (Appendix E, pp. 189-210), between the Eagle Mountain project and disposal of the same volume of waste at existing smaller landfills in the South Coast Air Basin.

68. There are not sufficient data available to analyze the emissions changes associated with delivery of waste to transfer stations (under the Eagle Mountain project) as compared with the "No Project" alternative, under which waste is delivered by a mix of truck types going to transfer stations and directly to landfills. Without knowing the location of transfer stations, it is not possible to conclude that emissions from refuse trucks will be lower compared with emissions associated with their current direct trips to the landfill. There is no technical basis for the commenter's conclusion that transfer vehicles will be "full powered" and that refuse collection trucks are currently "underpowered." While it is clear and correct that emissions from trucks going up a hill are greater than emissions from trucks traveling over level ground, it is also correct that emissions from empty trucks going down a hill are much lower than emissions from empty trucks on level ground. It is not possible to evaluate the potential benefits of the Eagle Mountain project suggested by the comment, given the fact that the location of future transfer stations is not known at the present time.

69. The extent to which emissions are displaced from the South Coast Air Basin into the desert is discussed in the draft EIS/EIR (see Appendix E, pp. 204-210). Additional air quality modeling analyses and risk assessments based on on-site meteorological and

baseline data have been performed and are included in the final EIS/EIR (see Attachments 7-9 of Appendix M).

70. There are not sufficient technical tools to evaluate the impacts of the Eagle Mountain project on ozone concentrations in the desert. It is for this reason that the assessment of ozone impacts in the draft EIS/EIR is based on changes in emissions of ozone precursors.

71. While the stated benefits may accompany the project, quantification of their effects would be quite speculative. As noted above, other than the use of new equipment and implementation of other emissions control measures not required in existing landfills, there is no clear "economy of scale" associated with the project. Estimates of project-generated dust were based on the equipment fleet proposed, which admittedly would produce less soil disturbance than many smaller vehicles. Nevertheless (as acknowledged two paragraphs later in the comment), particulate emissions may still represent a significant impact. The other considerations mentioned might be used to justify project approval but do not affect the conclusions of the report regarding air quality impacts, given the significance criteria used.

72. Impacts to ambient air quality were analyzed (on pages 408-418 of the draft EIS/EIR) separate from the emissions inventory. Location-specific factors were considered, and given the worst-case assumptions in the analysis, the impacts were considered significant.

73. It is agreed that every effort to reduce emissions should be incorporated into the project. While the commenter may not agree with the emissions criteria or the other criteria for significance, they are not arbitrary. In fact, the significance criteria are consistent with guidance from the EPA, California Air Resources Board, and South Coast Air Quality Management District.

74. For purposes of the impact analysis in the draft EIS/EIR, the cumulative effect of all sources directly associated with the project was analyzed. In this context, the separation of fugitive from non-fugitive sources is inappropriate.

75. This comment is correct. Table 13 of Appendix E of the draft EIS/EIR should appear as shown in this comment.

76. The discussion in the Affected Environment section will also be clarified to more accurately describe the record of PM10 violations in the air basin.

77. The on-site monitoring data available to date (Attachment 2, Table FEIR-AQ-6 of Appendix M of the final EIS/EIR) indicate some violations of the federal, as well as state, standard for PM10. Additional collection of data may indicate that the frequency of

violations at the site is indeed much lower than reported elsewhere in the basin. This would, however, not alter the conclusions of the draft EIS/EIR.

78. Seventy-five miles is a distance which reaches all of the communities within the Coachella Valley and other desert areas including Blythe. While some haul distances may be greater, it is also likely that many would be shorter. Therefore, 75 miles is considered a reasonable average haul distance.

79. The truck emissions factors for refuse hauling were developed using the California ARB-approved EMFAC/BURDEN emissions model for heavy-duty diesel trucks. These emissions factors are based on average heavy-duty diesel truck trips in the Southeast Desert Air Basin portion of Riverside County.

80. See Response 0001-55.

81. As noted in the footnotes to Table 27, Appendix E, the physical assumptions regarding fugitive dust generation were based on consultation with project personnel who have been testing the fine tailing material for use as liner material. The control efficiency assumed is based on empirical information from a similar operation.

82. The reference to 0.2 pound/day is to windblown dust not attributable to other sources, disturbances, or operations within the project. The total estimate of fugitive dust emissions in the absence of mitigation is 765.5 pounds/day. On-site dust monitoring to verify compliance with ambient air quality standards will be required.

83. There is no question that windblown dust poses a significant impact. This impact is clearly identified in the draft EIS/EIR (377, 378, 411, 413). The potential for transport of fugitive dust is acknowledged. The most important receptor in this regard is the Joshua Tree National Monument boundary. Impacts to the ambient concentrations at the monument boundary are presented in Table 34 in the draft EIS/EIR.

84. The commenter is correct in saying that the SCAQMD typically requires that activities with the potential to generate fugitive dust be stopped during windy conditions. Regulation IV, Rule 403, specifically states that ". . . a person shall not cause or allow the emissions of fugitive dust . . . such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source . . . ." The rule also says that ". . . every reasonable precaution [shall be taken] to minimize fugitive dust emissions from . . . solid waste disposal operation." Suspension of activity during winds in excess of 25 miles per hour was not considered as a separate mitigation measure since virtually all sources of fugitive dust would have active dust control programs applied to them.

85. See Response 0001-82 above.

86. See Response 0001-82 above.

87. The figures presented for total project emissions do include VOC emissions from both the flare itself as well as fugitive LFG emissions in the category "Landfill Gas Flares." Of the total 845 pounds per day of VOC, approximately 842 pounds are fugitive LFG and 3 pounds are from the flare exhaust.

88. The question of PSD applicability is discussed in the report. The comment is correct in suggesting that the project may not be subject to PSD review, and the EPA has so concluded.

89. Offset requirements, set forth in SCAQMD Rule 1303, are discussed in Appendix E (page 105). The landfill gas flares are designated as an essential public service under SCAQMD Rule 1302 and are entitled to obtain offset credits from the district's priority reserve. If insufficient emission credits are available in the district's priority reserve to completely offset the emissions from the landfill gas flares, SCAQMD Rule 1304.b.5 exempts the flares from the offset requirements provided they are equipped with BACT.

    Emission offsets are also required for the cover processing plant. No emission reduction credits associated with closure of the mine in 1982 were registered or approved by the SCAQMD. As a result, no credit for curtailment of the previous mining operation emissions is available for offset purposes. The following sources of emission offsets will be investigated during the district permitting process: control of existing stationary and mobile sources in the project area, emission offsets currently available from SCAQMD emission reduction credit banking system, inter-basin emission offset trades, and inter-pollution emission offset trades.

90. Rather than compare daily emission rates (in terms of pounds of pollutant generated per day) between truck and rail travel, it would be better to compare pounds of pollutant generated per 1,000 ton-miles traveled (lb/KTM). This revised comparison eliminates total distance traveled as a variable in the emission calculations. Using this approach, the emission factors (lb/KTM) for rail hauling are compared with the corresponding emission factors for truck hauling (see Figure FEIR-AQ-1 in Attachment 2, Appendix M of the final EIR/EIS).

    As shown in Figure FEIR-AQ-1, the emission factors associated with mitigated rail haul on the Eagle Mountain line are lower than the emission factors associated with Southern Pacific. Therefore, in order to combine the emission factors associated with the rail haul, it is necessary to use the percent of total miles traveled on each rail line (approximately 25 percent on the Eagle Mountain line and 75 percent on the Southern Pacific line) to calculate weighted average emission factors. A comparison of the combined rail hauling with the truck hauling emission factors indicates that the NOx and CO emissions for rail hauling are slightly higher (6 percent and 4 percent, respectively) than for truck hauling. However, the combined rail hauling emission factors for VOC, SO_2, and PM10 are significantly lower (45, 80, and 35 percent, respectively) than for truck hauling. This comparison, therefore, suggests that the difference in NOx and CO emissions between rail and truck hauling is negligible. Furthermore, this comparison indicates that rail hauling results in significantly lower VOC, SO_2, and PM10 emissions than truck hauling.

91. The introductory statement on page 105 (Appendix E) explains how regulatory requirements were or were not "counted" as mitigation. Requirements which already exist were calculated into project emissions and not counted as mitigation, although under CEQA such requirements can be considered mitigation. The revised Mitigation Reporting/Monitoring Program, located in Section II.C. of the final EIS/EIR, distinguishes between anticipated requirements which are the responsibility of SCAQMD or EPA and extra measures to be implemented specifically by the applicant.

92. Requirements not yet adopted or which are expected to have future implementation dates were included in the mitigation computations along with measures that can be incorporated which are not expected to be mandatory.

    Feasibility and cost effectiveness are not judged solely by the applicant. On the contrary, these factors are considered by the SCAQMD for each project and are part of their determination of what is BACT for a given installation.

93. Essentially this comment is correct, since the project area is under the administration of the SCAQMD where air quality regulations are already the most stringent in the country.

94. The discussions of mitigation efficiencies are included in the introductory review of potential mitigation measures in the air quality appendix (Appendix E, pages 105-124). A summary table of mitigation efficiencies, including percentage reduction in emissions for each criteria pollutant, is included in the final EIS/EIR (Attachment 5, Table 34 of Appendix M).

95. If the proposed Rail-Cycle (ATS&F and Waste Management proposal near Amboy) were developed concurrently, it is not expected to have a significant effect on operations at Eagle Mountain.

96. The only major change in emissions anticipated as a result of changes in the composition of the waste stream is the reduction in overall LFG generation. For a variety of reasons explained in the draft EIS/EIR, the estimates of LFG generation are quite uncertain under

the best of circumstances. Data are not yet available to allow great refinement of the LFG generation rates.

97. Based on scoping discussions with agencies during the preparation of the draft EIS/EIR, odor was not identified as a major issue. It has been raised in several public comments, however. In response to these comments, a discussion of odor has been prepared and is provided in Attachment 1 of these responses. Assuming proper maintenance and cleaning of all storage and transport containers and equipment, as required by state regulations, odor is not expected to represent a significant impact.

98. The secondary criteria of a 3-dBA increase was identified because this is the minimum increase in noise levels that is discernible by people.

99. It is true that the CNEL may not be the ideal descriptor for recurring isolated events, but it is the descriptor most universally used and accepted for transportation noise and the one by which the State of California and the County of Riverside judge land use compatibility. For these reasons, the CNEL was used as the primary basis for determining the significance of impacts. The noise study does recognize that there are many other metrics which attempt to quantify community response to noise (Sections 2.1 and 2.2 of the technical report in Appendix H of the draft EIS/EIR).

100. The comment acknowledges that the section regarding the transfer stations was intended to be informational only.

101. The rail noise analysis assumed conditions that were consistent with the current operations of the Southern Pacific line. For the new operations on the Eagle Mountain rail line, operating assumptions are presented on pages 10-11 of Appendix H of the draft EIS/EIR. For Phase I on the line to Eagle Mountain, train operations were assumed to occur during daytime hours only. The day/night split of train traffic for Phase II was assumed to be nine trains during the day, one train during the evening, and two trains during the nighttime.

102. With regard to train noise, it should be noted that only two train pass-bys per day would occur at the RTCF because this line would only be used during the first phase of operations, and it is anticipated that these operations would be during the daytime only. Additionally, a train this close to its end point would not be traveling at the 35 mph speed which was used in the calculations. Although a lower speed does not significantly affect locomotive noise, it does lessen car wheel noise. Using a maximum peak noise level to judge significance, as referred to in the comment, would not be appropriate in this situation. If a descriptor similar in nature were to be used, a 10-minute L_{eq} or an hourly L_{eq} would be more appropriate. Using the same measured train pass-by as referred to in the letter, this train would produce a 10-minute L_{eq} of 79 dBA at 50 feet from the track,

which corresponds to an exterior 10-minute L_{eq} of 74-75 dBA at the RTCF and an hourly L_{eq} of 67 dBA at the RTCF. Interior noise levels would be less due to shielding from the walls. These levels occurring twice per day during the daytime would not be a significant noise impact.

It should also be noted that other existing sensitive receptors are much farther away from the railway track than the RTCF and would be exposed to lower noise levels than those stated above. For example, the residences at the MWD pump station are 3,500 feet from the area of track where they have a line of sight uninterrupted by hills. Table 2 in Appendix H indicates that the existing one-hour L_{eq} values in this vicinity were measured at 46 dBA. Twelve trains per day at this distance would produce noise levels of about 40 CNEL based on Table 7 of the technical report, which is consistent with rural areas. Assuming that a 10-minute L_{eq} is 79 dBA at 50 feet, at 3,500 feet the 10-minute L_{eq} would be 50 dBA. Twelve events per day of 50 dBA L_{eq} occurring for ten minutes each in an area where the existing ambient is 46 dBA L_{eq} would be audible but would not constitute a noise level significantly intrusive on people's activities.

103. The 40 train passes assumed for the Southern Pacific railroad existing operations are an average number of train passes. This number can fluctuate as much as 30 percent based on market demand. Because the number of trains varies, and it will be many years before the project develops to its full daily capacity, it would be hard to distinguish an additional 12 passes occurring per day. Cumulative noise impacts are discussed in the draft EIS/EIR on pages 588 and 597.

104. The mean travel speed for Interstate 10 was assumed to be 55 mph, as stated in the appendix to the technical report. Since there is a grade along the highway, this is a reasonable assumption for the average speed over the length of I-10 under analysis. The 35 mph speed used for the other roadways was based on existing conditions determined by the acoustical consultant (Section 3.2 of the noise technical study in Appendix H of the draft EIS/EIR). The speed limit of 35 mph will be enforced.

105. The technical report refers to residential houses 100 feet from the roadways. This applies to Kaiser Road, not Eagle Mountain Road. Transport trucks would use Eagle Mountain Road and its extension exclusively.

With respect to truck traffic along Eagle Mountain Road and the Eagle Mountain Road Extension, several points are important:

a. There are no residences along Eagle Mountain Road, other than the residences at the Eagle Mountain pump station owned by MWD.

b. Where the residences at the pump station have a line of sight uninterrupted by topography, they are 3,500 feet from Eagle Mountain Road.

c. As shown in Figure 3 of the draft EIS/EIR, the vast majority of land adjacent to Eagle Mountain Road is owned by the federal government and under the jurisdiction of the BLM.

A heavy truck traveling at 35 mph along Eagle Mountain Road would produce a noise level of 80 dBA at 50 feet. At 3,500 feet, using an attenuation rate of 5 dBA for every doubling of distance plus 3 dBA for atmospheric absorption, the exterior noise level produced by the truck would be 46 dBA. Existing daytime average hourly noise levels in the vicinity of this area were measured at 46 dBA L_{eq}. Interior noise levels would be less due to attenuation by the buildings. It is not likely that the noise level of 46 dBA produced by a truck pass-by would significantly impact the residences at the MWD pumping station either during the daytime or during the nighttime.

Because the majority of the lands surrounding Eagle Mountain Road are not privately owned, it is not likely that new residences would be built in the near future. However, if residences are proposed at some time, the anticipated future noise levels of less than 60 CNEL at the edge of Eagle Mountain Road would not preclude development from occurring based on the residential land use compatibility criteria of 65 CNEL established by the County of Riverside.

Finally, MRC has proposed to limit truck traffic to one half of what was originally proposed and to eliminate all truck traffic (except that serving the desert area) within three years. The speed limit of 35 mph will be enforced.

106. The CNEL metric was used for evaluating transportation noise, in accordance with County policy. The criteria used to evaluate landfill operation impacts was a limit of 75 dBA L_{max}. In the absence of specific criteria from the County of Riverside, the maximum construction noise level limit of 75 dBA promulgated in Orange, San Bernardino, and San Diego counties was used.

107. As commented, it would have been more correct to use the mid-range values shown in Figure 98 of the draft EIS/EIR, but the use of these mid-range values would not result in different total noise levels being assumed for each grouping of equipment shown in Table 49 of the draft EIS/EIR. The worst-case operational noise levels were used in this situation to be conservative and because it is impossible to predict the distribution and location of equipment on the site at any given time and which equipment would be operating.

108. The draft EIS/EIR clearly states on pages 555 and 556 the conservative nature of the assumptions made and their effect on the results and conclusions. The text states that the noise contours of Figure 99 assume a single point noise source at the landfill boundary, but that under a more realistic situation, the noise source would be spread throughout the landfill area. The dispersal of the equipment would dissipate noise levels and they would be lower than those used in the analysis. The text also states that earth-moving operations at the project site would mostly take place inside a landfill pit which would provide shielding for the noise. The draft EIS/EIR then concludes that the noise exposure at the closest residential area "would be considerably less than the calculation from the worst-case scenario."

109. The landfill operations would be limited to the daytime hours and only the container handling yard would operate on a 24-hour basis. During the nighttime, the yard would only load or unload containers and perform maintenance activities.

110. Midsummer construction in a desert environment can be expected to occur in the early morning hours or at night. Construction operations within 1,000 feet of sensitive receptors, however, will be limited to daytime hours only.

111. Section II.A.5.c and III.F. of the draft EIS/EIR and Appendix B (page 23) describe the existing drainage patterns and initial concepts for drainage facilities proposed for the project. An updated drainage report has been prepared which amplifies these initial drainage concepts. The additional study provides detailed descriptions and calculations for the proposed facilities in both the interim and ultimate phases of development. The supplemental report is in agreement with the objectives stated in the draft EIS/EIR.

     The updated drainage report provides clarification of the separation and handling of the following classifications of drainage: natural drainage originating in Eagle Creek and Bald Eagle Creek; off-site drainage originating above the proposed landfill site; drainage runoff from both active and ultimate landfill areas; and drainage runoff from container handling and other operational areas.

     Detailed drainage analysis takes into account the hydrological aspects of premining, postmining, interim drainage, and ultimate drainage conditions. Because of the long life of the proposed project and the considerable area involved, the drainage plan will incorporate several interim stages of drainage development. Interim drainage patterns will be designed to avoid impacting active landfill operations. The ultimate drainage concept will incorporate final topographic and hydrological characteristics of the complete project.

     Throughout the development process, several key drainage objectives will be maintained: utilization of existing drainage systems; runoff protection for active landfill areas;

minimization of erosion; and protection of life and property. All hydrology and hydraulic design is provided in accordance with the criteria and standards of the Riverside County Flood Control District and the Regional Water Quality Control Board. Velocities of flow, flow capacities, free board, erosive action, and other criteria will be considered in the final design and sizing of all drainage facilities. All grading associated with development of the landfill site will be accomplished in accordance with County grading ordinances.

The hydrology and hydraulic calculations describing the revised drainage plan are found in Appendix L of the final EIS/EIR.

112. Mitigation measures are described in the drainage report (see Appendix L of the final EIS/EIR).

113. The updated drainage report includes a revised drainage plan for the Eagle Mountain project (see Appendix L of the final EIS/EIR). Calculations and methods of calculation are provided in the drainage report. All hydrology calculations and design of drainage facilities will be provided in accordance with the criteria and standards of the Riverside County Flood Control District and the RWQCB. The methods used to develop the estimated flows include flow velocities, capacities, free board, erosive action, and other standard criteria.

114. Calculations for both interim and ultimate drainage conditions have been prepared. The relative size and capacities of proposed facilities are described in the revised drainage report (Appendix L). Interim drainage, in all cases, will be routed away from the landfill sites so as not to impact active landfill operations. Protection of both on-site and off-site properties will be provided.

115. Historically, original flows from the project site were discharged to the southeast over a broad alluvial fan. During mining operations, much of the site drainage was diverted into the East Pit. Design of ultimate drainage facilities will be based on the final topographical and hydrological characteristics of the completed project site. A discussion regarding interim and ultimate drainage patterns has been provided in the drainage report (Appendix L). The East Pit will be used as part of the interim drainage plan. Initial on-site runoff and ultimate drainage will utilize the existing drainageway parallel to Kaiser Road.

116. Diversion of off-site runoff away from active landfill areas is a key element of the proposed drainage concept. Drainage originating from areas above the landfill site and operational areas will be collected in open channels and/or pipes and diverted into Eagle Creek or other conveyance channels. While the topography is steep, it is possible to design facilities to intercept the flow, minimize velocities, and prevent runoff from

reaching the operating landfill areas. The description of proposed facilities is provided in the drainage report (Appendix L).

117. The proposed landfill would be a Class III nonhazardous municipal solid waste facility and as such would only accept nonhazardous solid wastes and inert wastes. In the event that hazardous materials illegally enter the waste stream, the transfer stations would provide methods to detect, collect, temporarily store, and transport the unacceptable material to a licensed hazardous waste facility. Details of the screening process at a typical transfer station are provided in the draft EIS/EIR (pages 48-49 and 331-332). The process involves the sorting and removal of hazardous materials including liquid waste, hazardous waste, sewage sludge, incineration ash, radioactive waste, and biological or infectious waste from the waste spread on the tipping floor. Any hazardous waste recovered would be set aside for special handling in accordance with procedures established in the solid waste facilities permit which governs the operation of these facilities. Random inspections of the solid waste entering the landfill will be conducted by the Local Enforcement Agency to ensure that the screening procedures for hazardous materials performed at the transfer stations are adequately executed.

118. At the levels that methane, carbon dioxide, and nitrogen would be emitted at the landfill, they are considered nontoxic. The draft EIS/EIR discusses the explosive capabilities of methane and discusses measures to mitigate against gas migration.

119. The draft EIS/EIR assumes that 80 percent of the gas generated at the landfill would be recoverable and most of the remaining 20 percent would migrate to the air through intermediate cover soils and fill side slopes. A discussion of the effects of unrecovered landfill gas on workers at the site is provided under the Landfill Gas and Landfill Gas Condensate heading of the Public Health and Safety section of the draft EIS/EIR (pp. 337-338). To prevent worker overexposure, permanent subsurface LFG monitoring wells or detectors/alarms will be placed near structures in the immediate vicinity of the East Pit, including those structures proposed as maintenance and container handling offices. The revised health risk assessment for the project is included in Appendix M, Attachment 9, of the final EIS/EIR.

120. The personnel responsible for ensuring worker safety and health would be qualified to the satisfaction of the Local Enforcement Agency.

121. During mining operations, iron ore mineral processing procedures were performed by using gravity or magnetic separation techniques. No chemicals or other additives were used during processing. The fine tailing has been subjected to the EPA toxicity characteristic leaching procedure (TCLP) test and found to contain no compounds that are solubilized to action levels during this test.

122. The agency which regulates health and safety at the workplace in the state of California is CAL OSHA. Title 8, Subchapter 7, of CAL OSHA (General Industry Safety Orders) requires that all employers provide a healthy and safe environment for the employees. It is believed that compliance with these orders would provide a safe environment, which is a fundamental prerequisite in controlling injuries.

123. The EIS/EIR will be revised to reflect first aid training as a component of the emergency medical response.

124. The designated safety coordinator will monitor activities at the landfill to ensure that health and safety regulations are not violated. County health department inspectors would visit the landfill on a regular basis to ensure safe operating conditions. The overall conclusion is that if all applicable rules and regulations are complied with, even if the rules and regulations do not in themselves prevent occupational injuries, compliance will provide the healthy working environment which is a fundamental prerequisite in controlling injuries.

125. Truck and rail accidents were an issue of strong concern identified during the scoping meetings. This issue is addressed in the Public Safety section of the draft EIS/EIR because the discussion focuses on the impacts to public safety resulting from accidents involving vehicles transporting solid waste.

126. Gas monitoring at the perimeter of the landfill and in the community is discussed in the Landfill Gas and Landfill Gas Condensate section of Public Health and Safety (page 337 of the draft EIS/EIR). Although structures in the town of Eagle Mountain would not be affected by LFG migration due to their distance from the refuse mass and implementation of control measures stated in the draft EIS/EIR, routine subsurface monitoring is recommended for the townsite. Landfill gas monitoring would be conducted in compliance with the South Coast Air Quality Management District Rule 1150.1 (c)(3) and (4). Since there are several hundred buildings in the town, it would be impractical to install test wells near every structure. A network of five to six monitoring wells would be placed on approximate 1,000-foot centers in soils along the northern town perimeter. The wells will be constructed to allow monitoring to a depth of 20 feet below grade. Monitoring well sampling frequencies would initially be once per month, or subsequently greater intervals that may be specified by the SCAQMD.

127. The monitoring wells to be placed in the community of Eagle Mountain are discussed on page 337 of the draft EIS/EIR, Landfill Gas and Landfill Gas Condensate section.

128. The reactivation and full funding of the Eagle Mountain fire station is currently a condition of approval between the County and Management Training Corporation (MTC) for the return-to-custody facility expansion. The draft EIS/EIR (page 532) states

that full funding of the Eagle Mountain fire station (2 persons, 24 hours per day, 7 days per week) would not provide adequate fire protection for the area once the proposed landfill is operating. It is expected that additional personnel and equipment would be required above what will be provided by the County through the agreement with MTC. Fire personnel will receive additional training in the hazards associated with landfill operations to an emergency medical services (EMS) level of training required by the Riverside County Fire Department. The proponents of the project will be expected to provide their fair share of these operating costs. The project proponent would be required to prepare a Fire/Life Safety and Emergency Response Plan and a service agreement with the Riverside County Fire Department.

129. Title 8, Chapter 3.2 (California Occupational Safety and Health Regulations), Subchapter 7, of the California Code of Regulations, as part of the General Industry Safety Orders (Section 3203), would regulate worker safety at the site. Additionally, the proposed project must implement an injury prevention program in accordance with state Senate Bill 198. Project conformance would require the implementation and maintenance of an effective injury prevention program which must include the following:

   a. Identify the person or persons with responsibility for implementing the program.

   b. Include a system for ensuring that employees comply with safe and healthy work practices.

   c. Include a system for communicating with employees in a form readily understandable by all affected employees on matters relating to occupational safety and health, including provisions designed to encourage employees to inform the employer of hazards at the work site without fear of reprisal.

   d. Include procedures for identifying and evaluating workplace hazards to the satisfaction of the Local Enforcement Agency.

   Workers associated with the Eagle Mountain project would not be exposed to the type of hazardous materials which require implementation of a medical surveillance program at the workplace. Neither the Riverside County Department of Health nor CAL OSHA have regulations requiring periodic medical exams for workers at a Class III landfill.

130. The word “hygiene,” which appears in the last sentence of the fifth paragraph on page 348 of the draft EIS/EIR, should read “safety.”

DOCUMENT 0002 Letter from California Regional Water Quality Control Board (Region 7), September 13, 1991

1. This comment is correct. The letter from the California Regional Water Quality Control Board referred to in this comment was omitted from Volume I, Appendix A of the draft EIS/EIR (Notice of Preparation, Materials, & List of Persons Receiving Draft EIS/EIR). This letter follows as Exhibit 1.

2. The coarse tailing found on-site may be used as protective soil cover material. It shall consist of the following characteristics:

   a. Coarse tailing or screened overburden that is approved by the engineer, meeting all the requirements of Section 17225.16 of Chapter 3 of Title 14 of the California Code of Regulations.

   b. It shall be free of all cobbles or soil clods larger than four inches in maximum dimension.

   c. It shall be free of excessive gypsum, ferrous or calcareous concentrations and nodules, refuse, roots, or other deleterious substances.

3. A discussion of the quantity, sources, and method of handling of LFG may be found on pages 376-377 of the draft EIS/EIR. LFG condensate is discussed on pages 334-338. Preliminary estimates indicate that little LFG and condensate will be generated over the life of the landfill due to the very low moisture content of the incoming Class III municipal solid waste, arid desert climate, and a net moisture loss due to landfill gas generation. See Response 0001-54. Much of the knowledge for Class III municipal solid waste with low moisture content will be developed while working with this landfill. This work is ongoing and will be part of the RWQCB permitting process.

4. As suggested by this comment, a composite liner will be installed over all portions of the landfill. See Responses 0001-3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 20, 21, 22, 23, and 24 for a discussion of the liner characteristics and design and installation procedures. A discussion of the liner design and a figure illustrating a conceptual liner design are contained in Section II.B.1 of the final EIS/EIR.

5. Provision of the additional detail requested by this comment does not alter any of the conclusions of the draft EIS/EIR. Nevertheless, a description of the proposed monitoring program for the Eagle Mountain landfill project is provided below. The monitoring program has been designed in accordance with the requirements of the recently revised Title 23, Chapter 15, Article 5, of the California Code of Regulations to provide for

EXHIBIT 1

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, Go

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN • REGION 7
73-271 HIGHWAY 111, SUITE 21
PALM DESERT, CALIFORNIA 92260
Phone: (619) 346-7491

September 11, 1989

County of Riverside
Planning Department
4080 Lemon Street, Ninth Floor
Riverside, CA 92501

Attn: David Mares, Project Planner

RE: Agency Notice of Preparation of an Environmental Impact Report (EIR), Mine Reclamation Corporation Class III Landfill, Eagle Mountain

The subject notice of preparation (NOP) of the EIR for the proposed Class III waste management facility at Eagle Mountain was received in this office. The following environmental information should be included in the EIR:

1. The analysis of the impact of the project on the geology of the site should include a discussion of the site geologic setting, stratigraphy, seismicity, surficial soils, erosion and slope stability.

2. The analysis of the impact of the project on the hydrologic setting of the site should include a detailed discussion of the surface and ground water quality in the vicinity of the site.

3. An analysis of the impact of the project on the unsaturated zone underneath the site should be conducted.

4. A discussion of the mitigation measures to be implemented to mitigate the potential impacts of the project on the site characteristics stated in items 1, 2, and 3 should follow these items in the EIR.

If you have any questions concerning the subject matter, please contact Adnan Abdalla at 619-346-7491.

Phil Gruenberg
PHIL GRUENBERG
Executive Officer

AA/sa

cc: Mark B. Beizer, SCS Engineers

sufficient sampling for qualitative analysis and assurance of the earliest possible detection of a release from the waste management unit (WMU).

Due to the large scale of the proposed Eagle Mountain landfill project, the detection monitoring program (DMP) is designed to be implemented in phases concurrent with landfill operations. The phased implementation allows the DMP to meet Article 5 requirements for each phase of landfill operations as well as for the total landfill area.

Groundwater detection monitoring wells will be installed at the perimeter of each phase of landfill operations. As site operations progress, detection monitoring wells in areas of infilling will be abandoned and replaced at the new perimeter of landfill operations. Ultimately, monitoring wells will exist at the perimeter of the entire landfill. In this way, Article 5 requirements for detection monitoring will be fulfilled for each phase as well as for the landfill as a whole.

The detection wells will be placed in fracture zones, which are most likely to be impacted by a release from the WMU. The number of wells and their location within these zones will assure the detection of a release from the WMU at the earliest possible point and will be sufficient to meet Article 5 requirements.

When present, surface waters at the proposed Eagle Mountain landfill will be monitored. A release from the WMU is not expected to impact surface water due to drainage controls, which are to be installed at the site, and the lack of a gradient or pathway for leachate migration.

The foundation and monitoring layer underlying the bottom liner will create a monitorable vadose zone for the site. The location of the foundation and monitoring layer best assures the earliest possible detection of a release from the WMU to the vadose zone.

Soil pore-liquid in the vadose zone will be monitored and sampled with lysimeters located in a trench within the foundation and monitoring layer of the bottom liner system.

Detection monitoring wells and lysimeters will be installed according to Article 5 requirements.

Sampling of groundwater, surface water, and the vadose zone will be done according to a field sampling plan (FSP). All detection monitoring sampling will meet Article 5 requirements. The FSP includes procedures for equipment decontamination; sample collection, preservation, and storage; container labeling, sealing, and shipping; documentation; and chain of custody. Analytical methods and laboratory internal statistical procedures are also discussed in the FSP, which will be program-specific to the proposed Eagle Mountain landfill.

Quality assurance for the groundwater, surface water, and vadose zone detection monitoring program will be conducted according to a quality assurance project plan (QAPP). The QAPP addresses the field, sampling, and laboratory procedures to ensure the precision, accuracy, representativeness, comparability, and completeness of all data generated during detection monitoring activities. The policies, objectives, functional activities, and specific quality assurance/quality control activities designed to achieve the data quality goals are specified. The QAPP provides the quality assurance requirements for data handling and manipulation during all phases of the project. The plan is intended to guide the field, laboratory, and management personnel in all aspects of field investigation, data collection, management, and control. The QAPP is program-specific to the proposed Eagle Mountain landfill.

Analyses of samples from the groundwater monitoring wells, lysimeters, and surface water will be used to establish the water quality protection standards (WQPS) for the site. California Code of Regulations, Title 23, Chapter 15, states that WQPS should be calculated using water quality analyses conducted over a one-year period. The three media will be sampled quarterly for a period of one year before establishing WQPS.

To calculate the WQPS for the parameters other than EPA 601 and 602 constituents, the statistical method known as the Gaussian tolerance interval test (see Engineering Statistics, by A. H. Bowker and G. J. Lieberman, Prentice-Hall, 1965) will be used. This method is consistent with the proposed 23 CCR 2550.7(c) of Chapter 15, dated June 15, 1990. The Gaussian tolerance interval will be used to estimate the highest likely value of an observation from a specific population, based on the background data. Concentrations that exceed the interval can be regarded as representing significant changes in water quality.

For water quality data that is not normally distributed, a one-way parametric analysis of variance will be conducted. This procedure is called the Krustal-Wallis test. This procedure is appropriate for comparisons when the data, or the residuals from a parametric ANOVA computer program, have been found to be significantly different from normal or when a lot transformation fails to adequately normalize the data. This procedure will be conducted if the coefficient of variation is greater than 1.

For organic compounds which have no natural occurrence and, therefore, no background values, the WQPS will be determined in accordance with the California Code of Regulations (Title 23, Article 5, Chapter 15) and the approval of the RWQCB.

6. The comment is correct about the primary mechanism of landfill leachate transportation being through the vapor phase in contrast to the liquid phase under unusually dry conditions. This water vapor will be extracted from the landfill by the LFG collection system. LFG production and collection are discussed in greater detail in Response

0001-54 above. The various changes to the containment system are included in Section II.B.1 of the final EIS/EIR.

7. Additional investigation has shown that the water in the East Pit was groundwater. This water has now dropped below the bottom of the pit. There currently is not enough recharge from all possible sources, which includes the water in the stockpile material, leaking pipes, and natural runoff, to maintain earlier water elevations in the pit.

8. A discussion of the hazardous waste handling process is provided on pages 39-40 and 331-333 of the draft EIS/EIR. The additional detail requested in this comment is provided below. Load-checking of incoming refuse would occur at the transfer station and MRFs to remove hazardous materials. Each transfer station and MRF would initiate its own load-checking program as required under the facility permit and is not part of the proposed project. However, as part of the proposed project, MRC would institute a periodic inspection program at the landfill to monitor the continued compliance and effectiveness of the load-checking programs. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the LEA (County of Riverside Department of Health).

   As part of the random inspection process at the landfill, the LEA will designate specific containers as loads for inspection. These will be diverted to the on-site waste inspection facility for thorough inspection. The origin of loads found not to be in compliance will be noted and appropriate action taken. In the event that hazardous or other unacceptable materials are identified during the random inspection at the landfill, they will be removed from the site by properly licensed personnel. The responsible party will be notified that the wastes were illegally deposited at the site and will be charged for the disposal costs incurred. All incidents will be reported to the Colorado River Basin RWQCB at Palm Desert and the Riverside County Department of Health.

   An on-site Eagle Mountain waste screening/inspection facility will provide a MRF-type screening process where virtually all hazardous materials/wastes are physically removed from "local waste." "Local waste" includes waste from only the communities of Desert Center, Lake Tamarisk, and Eagle Mountain. This facility will not be expanded and is subject to spot checking by the LEA.

   Hazardous wastes derived at the landfill (e.g., paints, fuel oil, and solvents from maintenance activities; the organic phases from leachate or landfill gas condensate; and small quantities of hazardous materials recovered from the on-site waste inspection facility) will be segregated and containerized as required by regulations and temporarily stored on-site. These wastes will be periodically removed from the site to a licensed hazardous waste facility by a licensed hazardous waste carrier under manifest as required by state and federal law.

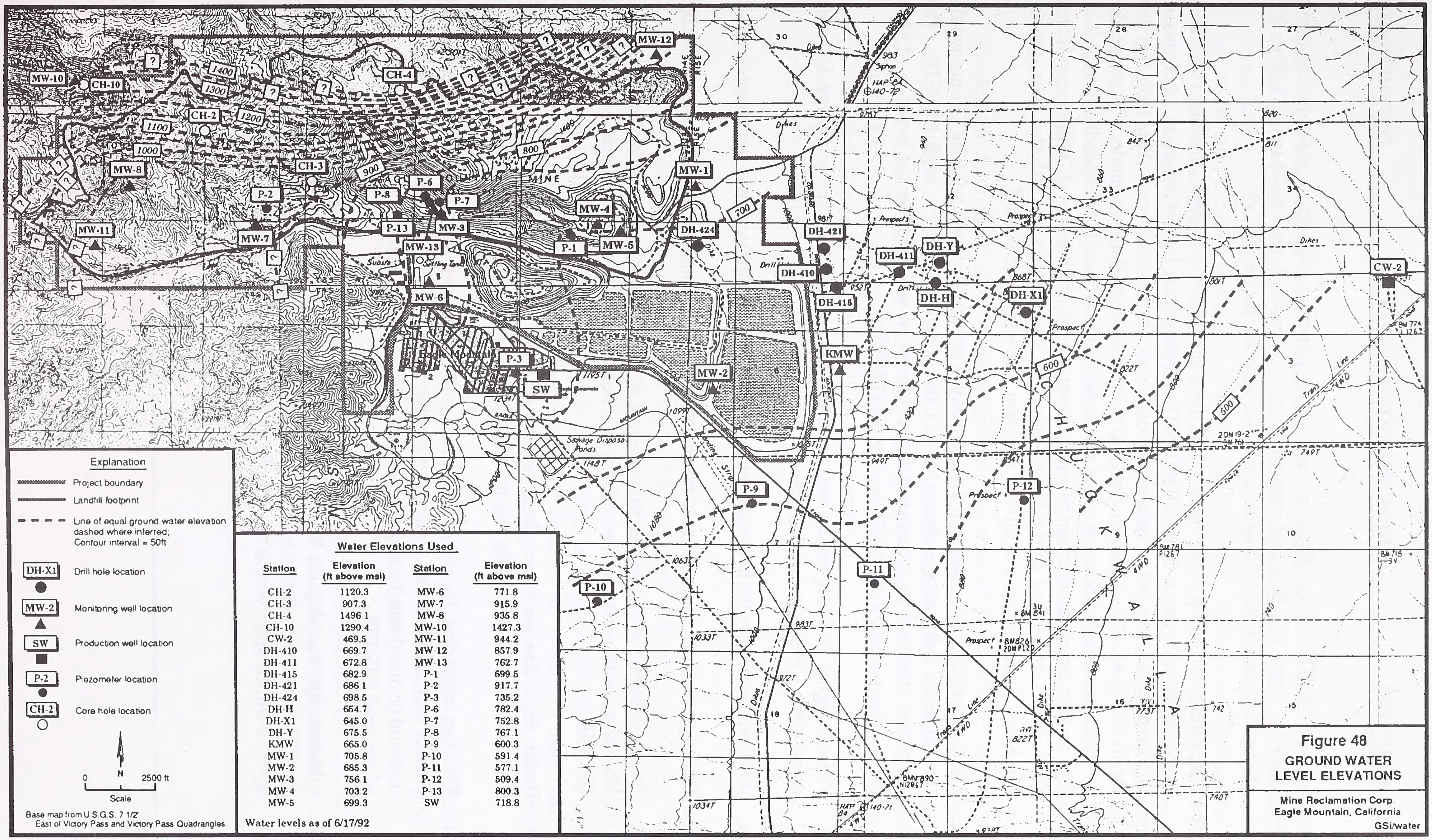
9. The location and frequency of accidents is difficult to predict. Emergency response and clean-up will be handled in accordance with current plans prepared in accordance with state regulations. As required by the State Health and Safety Code (Div. 20, Ch. 6.95), Southern Pacific's Emergency Response Plan is presently on file with the Public Utilities Commission and Counties of Riverside and San Bernardino. See Response 0026-3 for more details of this requirement.

10. See Responses 0001-111, 112, 113, 114, 115, and 116 above. Interim drainage plans as well as landfill operational plans, in accordance with state regulations, provide for the separate collection of rain which falls directly on working landfill sites and mixes with waste material. Drainage from these areas will not be mixed with natural "clean" runoff but rather directed into storm water detention facilities. The water will then be treated to remove possible contaminates. Waste oil in runoff will be separated and/or treated by preengineered treatment facilities immediately adjacent to the detention areas. In accordance with National Pollutant Discharge Elimination System (NPDES) standards, all potentially hazardous discharges will be tested and monitored. Discharged waters will be tested and monitored in accordance with both federal and state regulations, including Section 402(p) of the federal Water Pollution Control Act as administered by the Regional Water Quality Control Board, and, if acceptable, used for dust control. Material removed through the treatment process will be placed in tank trucks and properly disposed of at approved off-site disposal sites. The updated drainage report is contained in Appendix L of the final EIS/EIR.

11. Figure 64 of the draft EIS/EIR is a generalized fault map. Many more detailed maps exist, most notably the California Division of Mines and Geology Fault Map and also their Salton Sea Geologic Map of California. The fault evaluation report dated September 12, 1991 was prepared by Dr. Richard Proctor for the site and includes copies of fault and seismicity maps for the site in addition to the one in the draft EIS/EIR. This report is incorporated in the final EIS/EIR by reference and can be reviewed at the County of Riverside Planning Department. See Response 0001-21.

12. See Responses 0001-21 and 0002-11.

13a. The comment is incorrect. The geologic and hydrogeologic information used in the preparation of the draft EIS/EIR was referenced and summarized in Section III (pages 111-137; see also Section I, pages 244-257). In connection with the Report of Waste Discharge (ROWD), additional wells have been drilled since the initial publication of the draft. This ROWD permit information can be used to illustrate a groundwater elevation contour map that shows depth to groundwater, direction, and hydraulic gradient beneath the landfill footprint. An illustration of a groundwater elevation map is provided in revised Figure 48. This data will be used by the RWQCB in connection with its permit review and approval of the facility groundwater detection monitoring system, required



Water Elevations Used

Station	Elevation (ft above msl)	Station	Elevation (ft above msl)
CH-2	1120.3	MW-6	771.8
CH-3	907.3	MW-7	915.9
CH-4	1496.1	MW-8	935.8
CH-10	1290.4	MW-10	1427.3
CW-2	469.5	MW-11	944.2
DH-410	669.7	MW-12	857.9
DH-411	672.8	MW-13	762.7
DH-415	682.9	P-1	699.5
DH-421	686.1	P-2	917.7
DH-424	698.5	P-3	735.2
DH-H	654.7	P-6	782.4
DH-X1	645.0	P-7	752.8
DH-Y	675.5	P-8	767.1
KMW	665.0	P-9	600.3
MW-1	705.8	P-10	591.4
MW-2	685.3	P-11	577.1
MW-3	756.1	P-12	509.4
MW-4	703.2	P-13	800.3
MW-5	699.3	SW	718.8

Water levels as of 6/17/92

Figure 48
GROUND WATER
LEVEL ELEVATIONS

Mine Reclamation Corp.
Eagle Mountain, California
GSi/water

by this EIS/EIR as a mitigation measure for potential impacts to groundwater (draft EIS/EIR, pages 322-323) and required by regulations in Article 5, Chapter 15, Title 23, of the California Code of Regulations. See also Response 0002-5.

13b. Data referenced above (13a) confirm that there appears to be a single, distinct water table in the fractured bedrock that is 50 to 1400 feet beneath the lowest elevation where waste will be placed. No areas of perched groundwater were encountered. This indicates that the fractured bedrock allows movement of water down to the water table. Therefore, the comprehensive monitoring of this water beneath and adjacent to the landfill is possible. The earliest possible detection of a release into the unsaturated zone will be conducted through the monitoring of the foundation layer immediately beneath the liner system. For a description of the monitoring program, see Response 0002-5.

14. This comment does not question the adequacy or accuracy of the draft EIS/EIR nor would the requested information change any of the conclusions of the draft EIS/EIR. The suggested approach to subsequent investigations to design the exact location of each monitoring well have been followed in the GWWP.

15. Video logging is being used, and, as suggested, continuous core sampling is being completed. Core recovery has been very successful.

16. Work characterizing the hydraulic interconnectedness of the fracture system has occurred.

17. The requested information would not change any of the conclusions of the draft EIS/EIR.

18. The suggestions in this comment have been incorporated into the well drilling program. However, the requested information would not change any of the conclusions of the draft EIS/EIR.

19. Packer tests have been completed in the new wells that have been installed at the site. This additional information will not change the conclusions of the draft EIS/EIR.

20. The data collection by the groundwater wells will determine if tracer studies would provide any additional information regarding the movement of groundwater. However, it should be noted that the requested information would not change any of the conclusions of the draft EIS/EIR.

21. Adequate hydrogeological information can be provided to the RWQCB for the entire landfill that demonstrates compliance with the requirements of Chapter 15. The requested information would not change any of the conclusions of the draft EIS/EIR.

22. See Response 0002-5 above. The desire for "the earliest possible detection of any leaks" is satisfied by the proposed vadose zone monitoring plan that will detect leakage immediately beneath the liner system. The earliest possible detection of leaks in the groundwater is the point on the groundwater table where any leakage would first contact the water table. Monitoring the water table beneath and adjacent to the landfill will provide the earliest possible point in the groundwater to detect leakage. Section 2550.7(e)(3) of Article 5 states, "If a facility contains contiguous waste management units, separate groundwater monitoring systems are not required for each such unit if the discharger demonstrates to the satisfaction of the Regional Board that the water quality monitoring program for each unit will enable the earliest possible detection and measurement of a release from that unit."

    In addition, the location of the monitoring well to be used for monitoring Phase I at the start of operations is intended to have a life suitable to monitor that area until additional refuse is placed in the eastern sections of Phase I. Prior to the start of infilling in this area, additional groundwater monitoring well(s) will be installed in accordance with permitting requirements of the RWQCB. These new wells will also provide the earliest possible detection from the overall Phase I infill area.

23. See Response 0001-21.

24. See Response 0002-11.

25. See Response 0001-21 and 0002-11. Also, the comment "age dating of [alluvial] materials is a moot issue if none are found to be displaced by faulting" is correct. As with the project site, two localities (East Pit and road cut) provide evidence that unbroken alluvial materials overlie the two largest bedrock faults at the site. With these two fault exposure localities, it is not believed additional shallow trenches are needed. In fact, very deep trenches would have to be excavated, because of the blanket of mine tailing fill covering much of the alluvium in and around the community of Eagle Mountain. Bedrock could be many tens of feet below this fill and alluvium.

26. Mr. Anderson's statement that no limestone occurs in the footprint of the proposed landfill is correct. This response will serve to acknowledge that all of the blue color coded areas along the Eagle Creek fault are schistose meta-arkose material.

27. This comment does not question the adequacy or accuracy of the draft EIS/EIR and hence no response is necessary. Additionally, the results of the analysis mentioned in this comment would not change any of the conclusions of the draft EIS/EIR.

28. Please see Response 0002-4 for a more detailed description of the proposed liner.

29. See Response 0001-11.

30. See Responses 0001-10 and 0002-4.

31. See Response 0002-5.

32. The comment is correct. The cited report is included in Appendix B of Volume I of the preliminary ROWD, on file with the RWQCB.

33. Please see Responses 0002-13, 16, and 20. The additional well data will provide more information about the hydroconnectedness of fractured bedrock.

34. Please see Responses 0002-13, 16, 20, and 33 above.

35. The data being requested in this comment is included in Appendix B of Volume I of the preliminary ROWD, on file with the RWQCB.

36. Previous boreholes at the site as well as boreholes that may still exist within the landfill area have been identified. See Response 0001-18.

37. Wells will be installed in locations that can be paired with future wells to provide the requested pump tests. The requested information would not change any of the conclusions of the draft EIS/EIR.

38. The additional information requested regarding declining water levels will be provided to the RWQCB. However, provision of the additional detail requested by this comment does not alter any of the conclusions of the draft EIS/EIR.

DOCUMENT 0003 Letter from South Coast Air Quality Management District, September 17, 1991

1. The draft EIS/EIR recommends a single reanalysis of ambient air quality levels prior to start-up of the landfill (see Appendix E, page 130). Repeated modeling analyses would not generate new information regarding project impacts; are not required by any district, state, or federal regulation or policy; are not necessary to monitor any recommended mitigation measures; and do not result in any air quality benefits. Therefore, repeated modeling analyses are not recommended as a mitigation measure.

2. Mitigation Measure AQ-23 (Appendix E, page 130) requires a reanalysis of ambient air quality impacts, including those at the Joshua Tree National Monument, and requires that MRC develop and submit for approval additional mitigation measures as needed to mitigate remaining significant impacts at the monument. This revised modeling using

weather data collected on-site has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5 of Appendix M of the final EIS/EIR. The results of the revised modeling show that project impacts at the Joshua Tree National Monument will not exceed federal Class I or II increments. Therefore, the results of the revised air quality modeling do not indicate a need for additional mitigation measures. Nevertheless, MRC has revised Mitigation Measure AQ-9 to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce Eagle Mountain railway locomotive emissions.

3. The impacts of the "No Project" alternative are fully discussed in the draft EIS/EIR (Appendix E, pp. 189-198). The potential increase in emissions from the operation of the project compared with the "No Project" alternative is discussed in the draft EIS/EIR as well (Appendix E, pp. 198- 210). The comment refers to the Executive Summary; the requested information is provided in the body of the air quality appendix.

4. The relative impacts of the proposed project and all the alternatives, including the "No Project" alternative, are discussed in the draft EIS/EIR separately for the SEDAB and the SCAB (Appendix E, pp. 204-210). The analysis in the draft EIS/EIR indicates what the comment expresses: each of the project alternatives would result in no change, or in a decrease, in emissions within the South Coast Air Basin as compared with the "No Project" alternative, while increasing emissions in the SEDAB.

5. The draft EIS/EIR includes an accounting of truck and train emissions, as appropriate, for each alternative considered. Figure FEIR-AQ-1, included in Appendix M (Attachment 2) of the final EIS/EIR, shows a simple comparison of truck and train emissions per ton-mile of material moved. The data indicate that modern, clean, on-highway trucks have generally lower emissions than uncontrolled locomotives. However, locomotives which use the mitigation measures recommended for the Eagle Mountain project result in generally lower emissions per ton-mile than on-highway trucks.

6. The draft EIS/EIR indicates that under the "No Project" alternative, truck traffic for waste haulers would increase by an average of 12.2 miles per trip as compared with current disposal practices (Appendix E, page 190). Assuming an average load of 20 tons of waste, and based on 18,000 tons per day of waste disposal, the increase from current levels in vehicle miles traveled (VMT) is 4.01×10^6 annual VMT for the "No Project" alternative. By comparison, the draft EIS/EIR shows that delivery by truck of 4,000 tons per day of waste to the Eagle Mountain site would result in an increase of 10.95×10^6 annual VMT. This figure is reduced to 5.48×10^6 annual VMT under the proposed truck use reduction discussed in Section II.B.2 of the final EIS/EIR.

Neither of these values is useful in assessing the air quality impacts of centralized MRFs as compared with the impacts of waste disposal activity without them. As stated in the draft EIS/EIR, and as acknowledged by the commenter, an analysis of the specific impacts of MRFs is not possible at this time, since none have been proposed. The siting and approval of MRFs will be subject to environmental review at the time of their proposal. An analysis of site-sensitive impacts, such as VMT, would be remote and speculative at the present time. The summary of on-site emissions from all MRFs shown in the draft EIS/EIR (Appendix E, page 74) represents the best information available at the present time.

7. The comment is correct in that there is no comparison of the emissions associated with all waste disposal activities with and without the project. However, such a comparison is not necessary to evaluate the air quality impacts of the project, since local collection of refuse is not expected to be affected by the selection of the ultimate disposal site. In addition, as discussed in the draft EIS/EIR, a discussion of impacts of transportation of waste to MRFs is not possible because site-specific environmental analyses for each proposed MRF are not available.

   The air quality impacts associated with the proposed project, and with each alternative, are adequately characterized by a comparison of emissions from those aspects of waste collection which would be changed by the projects (or the alternatives). A comparison between the increase in emissions due to the project and the increase in emissions due to the “No Project” alternative (which would not occur if the project were to be implemented) is presented in the draft EIS/EIR (Appendix E, pp. 198-210).

8. There are no proposals to transport waste by rail to existing landfills; an analysis of the impacts of such a proposal would be remote and speculative at the present time. In fact, few, if any, of the existing landfills in southern California are rail-accessible, making this option practicably infeasible as a project alternative.

9. It is not clear what additional analysis is requested in this comment. The draft EIS/EIR provides a detailed analysis of the emissions increases associated with the proposed Eagle Mountain project and with all the alternatives considered separately for each affected air basin and for the project site itself (Appendix E, pp. 198-210).

10. The growth in the number of MRFs is associated with the expected gradual change in current waste hauling practices from decentralized distribution to close-in landfills to centralized recycling and transfer facilities, and not due to an increase in waste disposal requirements. As discussed in the draft EIS/EIR, no analysis of truck transportation to MRFs or displacement of existing truck traffic is possible at the present time, because no MRFs have been proposed. Site-specific impacts associated with the MRFs, such as

truck traffic, will have to be discussed in the environmental review of each individual MRF when the MRF is proposed.

11. The draft EIS/EIR includes the requested analysis, except as to the impacts of transportation of waste by truck to MRFs. Specifically, Appendix E of the draft EIS/EIR shows the increases in emissions due to rail and truck traffic (see tables on pages 76-77, 91, 132-133, 149-150, 157, 164-165, 178, 180-181, and 191). The only quantifiable, reasonably foreseeable decrease in truck traffic associated with any of the project alternatives would be a decrease in the incremental VMT associated with the "No Project" alternative. The emissions associated with this increment are shown in the draft EIS/EIR, Appendix E, page 191.

    The potential increase in emissions due to material handling at MRFs in the SCAB and SEDAB is also found in the draft EIS/EIR (Appendix E, pp. 74, 91, 132, 148, 157, 164, 176, 180, and 191). As discussed in the draft EIS/EIR, no analysis of site-specific impacts associated with the MRFs can be presented at this time, because no sites have been proposed and none are part of the Eagle Mountain project. The generic estimate of emissions associated with a single MRF, presented in the draft EIS/EIR on Appendix E, page 73, represents the best information currently available.

12. The specific emissions levels associated with each of the project alternatives is included in the draft EIS/EIR, Appendix E, as follows:

Eagle Mountain project, without mitigation	page 91
Eagle Mountain project, with mitigation	page 132
Reduced Operations alt., without mitigation	page 157
Reduced Operations alt., with mitigation	page 164
Rail Only alternative, without mitigation	page 178
Rail Only alternative, with mitigation	page 180
No Project alternative	page 191

    These emissions levels are compared in the draft EIS/EIR in Appendix E, Figures 35-44. Table FEIR-AQ-1A, summarizing the same information, is included in Appendix M, Attachment 2 of the final EIS/EIR.

13. Table FEIR-AQ-1B, included in Appendix M, Attachment 2 of the final EIS/EIR, shows a comparison of the truck VMT and corresponding emissions associated with each project alternative, based on the information contained in the draft EIS/EIR, Appendix E. In addition, Table FEIR-AQ-1B shows the truck VMT and corresponding emissions associated with the reduced truck operations mitigation measure.

14. Alternative fuels do not result in inherently lower emission levels, except in specific applications. For on-highway vehicles, California's low emission vehicle regulations, and the corresponding requirements of SCAQMD Rule 1601, achieve the objectives of what are popularly referred to as "alternative fuels." While alternative fuels may be used to comply with these regulations, they are not essential, nor do they provide any air quality benefits as compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low emission vehicle programs are discussed in the draft EIS/EIR (Appendix E, pp. 107-108).

    For locomotives and landfill equipment, alternative fuels may provide air quality benefits. Appendix E of the draft EIS/EIR discusses the use of alternative fuels (such as methanol, natural gas, or LPG) as well as electricity for locomotives (pp. 115-117) and for landfill equipment (pp. 120-121). Mitigation Measure AQ-16 requires that wherever available, electric versions of landfill equipment such as overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative-fuel technology will be used depending on air permitting standards. Electrification of this equipment would reduce the emissions associated with landfill equipment by approximately five percent. The actual emissions reductions associated with these measures are shown in Table FEIR-AQ-4 (Appendix M, Attachment 2 of the final EIS/EIR).

    Mitigation Measure AQ-9 has been revised in the final EIS/EIR (see Section II.C.) to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from Eagle Mountain railway locomotives. The revised Mitigation Measure AQ-9 includes a specific timetable for conducting the feasibility study. A comparison of the emissions from the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M).

    No quantification of air quality benefits from the use of alternative fuels in landfill equipment is possible at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used in the Eagle Mountain project.

15. No significant environmental impacts or mitigation have been identified in association with the receipt of approximately 200 truck loads per day of containerized waste at the Eagle Mountain site. Under the assumptions contained in the draft EIS/EIR, containerized waste would be shipped to the site from areas within an average radius of 75 miles, which excludes the traffic-congested portions of the South Coast Air Basin. No significant traffic impacts were identified in the draft EIS/EIR due to this volume of truck traffic.

Furthermore, MRC has proposed that truck traffic to the project site be reduced from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). See Section II.B.2 of the final EIS/EIR. This will reduce traffic impacts to levels even lower than the current, less than significant proposed levels.

16. Since none of the MRF locations have been identified as yet, an analysis of site-specific impacts (such as truck traffic) at the MRFs cannot be performed. The site-specific impacts associated with the MRFs will be conducted in accordance with CEQA requirements as each site is identified.

17. The potential for traffic delays is discussed in the draft EIS/EIR on page 154, as well as in Appendix D of the draft EIS/EIR. The congestion caused by increased truck traffic to and from the landfill site is discussed in the draft EIS/EIR on pages 155-157; Appendix D contains a more detailed discussion. Since none of the MRF locations have yet been identified, an analysis of site-specific impacts at the MRFs (such as traffic congestion) cannot be performed.

18. The draft EIS/EIR included emissions associated with the delivery by truck of up to 4,000 tons per day of waste to the Eagle Mountain site. This estimate was based on the assumption that the cost of using trucks to haul containerized waste to the landfill would be less than the cost of using trains if the driving distance is less than an average of 75 miles. This average radius of 75 miles is generally consistent with the commenter's proposed maximum radius of 100 miles, since some waste will be hauled from less than the average distance and some will be hauled from more. Since the preparation of the draft EIS/EIR, the amount of refuse transported by truck has been reduced by half from 4,000 tpd to 2,000 tpd. The emissions impacts associated with this project modification are discussed in Appendix M, Attachment 10 of the final EIS/EIR.

    More accurate information regarding the potential split between truck and rail transportation is not available at this time, because no contracts for disposal of waste at the landfill have been signed as yet. The most likely source of waste hauled to the landfill by truck is the desert portion of Riverside County. Riverside County has reserved a capacity of up to 2,000 tons per day in the Eagle Mountain landfill. Thus, the draft EIS/EIR conservatively evaluates the truck traffic and the emissions impacts associated with twice the likely volume of truck traffic.

19. The locations of the MRFs which may be used to transfer waste from local collection systems to the landfill have not been established. Each of these stations would require its own local land use permit and would be subject to appropriate environmental review at the time such a permit is issued. An analysis of the impacts of site-specific vehicle trips associated with MRFs is not possible at the present time, given the lack of information regarding specific MRF locations and design features.

20. Mitigation is required under CEQA/NEPA only for significant environmental impacts. No significant impacts have been identified in the draft EIS/EIR related to traffic congestion due to the use of trucks to haul waste to the Eagle Mountain site or to indirect air quality impacts associated with truck-induced congestion. Thus, no mitigation measures for congestion-related impacts is warranted.

    Should the SCAQMD adopt regulations which restrict all truck operations to selected times of the day, trucks which deliver waste to the Eagle Mountain site would be required to comply with such regulations.

21. See Response 0003-19.

22. The draft EIS/EIR acknowledges that the landfill gas collection and disposal system is subject to permit requirements of the South Coast Air Quality Management District. Air quality permits to construct and operate this system will be obtained prior to the commencement of landfill operations.

23. The draft EIS/EIR incorrectly refers to the 0.3-second residential time for flares on page 70; the reference in Appendix E, which includes the discussion of BACT for flares, correctly refers to the 0.6-second retention time required by the district's BACT guidelines.

24. Neither CEQA nor NEPA require that all regulatory permit applications be included in the EIS/EIR. This is because the environmental review process can require project design changes or mitigation measures which must be reflected in subsequent applications to responsible agencies, such as the SCAQMD. There is not enough information available at the present time to prepare the Rule 1150.1 application and associated compliance plan. The required plan will be prepared, submitted to the SCAQMD, and approved by the district prior to the operation of the landfill.

25. It is unclear which factors the commenter is referring to. The flare emission factors for criteria pollutants are shown in the draft EIS/EIR, Appendix E, page 83. All of the available data regarding flare emissions are presented, and the best estimated values for the Eagle Mountain project reflect anticipated SCAQMD requirements for best available control technology. Average values are not presented.

    The emission factors for trace concentrations of toxic air contaminants are presented in the draft EIS/EIR in Appendix E, pages 84, 98, and 99. Both the maximum and the average concentrations of trace toxic air contaminants measured by the SCAQMD in tests of other landfills are shown, in order to present the range of potential risks. The data on which the values in the draft EIS/EIR are discussed in Attachment 9 of Appendix M of the final EIS/EIR. The data are taken from tests conducted on four southern

California landfills. Given the uncertainty in the emission factors for these trace contaminants, and given the fact that risk assessments are based on 70-year projections, this range is an appropriate and acceptable technique for presenting the potential risks.

26. The only stationary internal combustion engines associated with the Eagle Mountain project, and which are subject to the requirements of Rules 1110.1 and 1110.2, are associated with liner material preparation. Mitigation Measure AQ-16 would require that these engines be replaced with electric motors wherever available; in this event, they would not be subject to the requirements of either Rule 1110.1 or 1110.2. Where not available, alternative-fuel technology will be used depending on air permitting standards. Failure to implement Mitigation Measure AQ-16, however, would require compliance with the applicable district rules.

    Rule 1110.1 does not apply to engines operating in the Southeast Desert Air Basin portion of Los Angeles and Riverside counties [Rule 1110.1 (g)(8)], and Rule 1110.2 does not apply to engines operating in the Riverside County Southeast Desert Air Basin area within the South Coast Air Quality Management District, but not including the nonattainment planning area of the Riverside County SEDAB [Rule 1110.2 (h)(7)]. At this time, one cannot confirm or deny if the project area is within the aforementioned nonattainment area of the Riverside County SEDAB, since the district is not clear as to what portions of the county are within said nonattainment area.

27. The draft EIS/EIR discusses perimeter landfill gas monitoring in the mitigation of landfill gas impacts. "The LFG control system will also consist of a series of gas migration probes placed around the perimeter of the site to detect off-site gas migration. Probe spacing and depth will conform with SCAQMD and CIWMB guidelines (70-3)." A network of five to six monitoring wells will be installed within a 1,000-foot radius in soils along the northern town perimeter. Also, as discussed on page 57 of Appendix E, measurements of both horizontal and surface migration of landfill gas will be conducted.

28. As discussed in the draft EIS/EIR on page 338, leachate is a potentially hazardous material and is subject to special provisions regarding its collection, handling, and disposal. For the Eagle Mountain project, the leachate will be treated to separate the organic phase (which contains the potentially hazardous compounds) from the aqueous phase (water). The water fraction will not be used for dust control unless it satisfies all applicable air and water quality requirements for its use as a dust suppressant and will not result in objectionable odors. An alternative method of handling leachate/condensate will be to collect and store it for off-site treatment and disposal. All appropriate regulations for the handling of hazardous materials will be observed.

29. The district's handbook for preparation of EIRs was consulted during preparation of the draft EIS/EIR for the Eagle Mountain project. The sources of fugitive dust emissions

associated with the project are described in the draft EIS/EIR (Appendix E, pp. 85-90). Mitigation measures for fugitive dust are discussed on pp. 123-124 and 129-130. Additional dust mitigation measures are included in Table FEIR-AQ-2 of the final EIS/EIR (Appendix M, Attachment 2) and in the revised Mitigation Reporting/ Monitoring Program (see Section II.C. of the final EIS/EIR), based on comments from the SCAQMD. With the implementation of these mitigation measures, landfill operations will be carried out in such way as to restrict dust levels to a minimum.

30. The draft EIS/EIR (pages 382-383) requires several mitigation measures for fugitive dust, which require periodic surface treatments to minimize dust emissions. The Mitigation Reporting/Monitoring Program (see Section II.C. of the final EIS/EIR) will require that the landfill operator develop and implement a dust suppression plan to ensure that dust-generating surfaces are routinely checked and treated.

31. See Response 0003-31.

32. As discussed in the draft EIS/EIR (Appendix E, page 103), the cover processing facility will require an air quality permit from the SCAQMD.

33. The emissions calculations presented in the draft EIS/EIR include emissions from activities in the Coachella Valley. The project activities which will generate emissions in the Coachella Valley are train and truck traffic hauling containerized waste to the project site.

    Of the total 269-mile train route assumed in the draft EIS/EIR analysis, 78 miles are located within the Coachella Valley. The emissions associated with this rail traffic are (a) NOx, 582 tons per year; (b) CO, 236 tons per year; (c) PM10, 14 tons per year; (d) ROG, 40 tons per year; and (e) SO_2, 74 tons per year.

    Emissions from the truck hauling within the Coachella Valley cannot be quantified at this time due to a lack of specific information regarding the location of MRFs, which would be the points of origin of the truck-hauled waste. As a worst case, one could assume that all of the truck-hauled waste originates within the Coachella Valley. Based on this worst-case assumption, the truck emissions associated with the project in the Coachella Valley would be (a) NOx, 157 tons per year; (b) CO, 74 tons per year; (c) PM10, 23 tons per year; (d) ROG, 25 tons per year; and (e) SO_2, 32 tons per year. Figure FEIR-AQ-2 (Appendix M, Attachment 2 of the final EIS/EIR) compares the estimated project emissions from rail and truck travel in the Coachella Valley with estimates of emissions from all rail and truck travel in the Coachella Valley and with estimates of emissions from all sources in the Coachella Valley.

34. See Response 0003-31.

35. Compliance by the project with the SCAQMD's New Source Review requirements is discussed in the draft EIS/EIR, Appendix E, pp. 102-105. The need for emissions offsets is discussed in this section as well.

    Discussions with the SCAQMD's Engineering Division staff indicated that emissions offsets will be required for emissions from the flares and from the cover processing plant. Emissions from the cover processing plant required to be offset include both the stationary equipment and the mobile equipment associated with that plant.

    Some or all of the emissions offsets for this project may be provided through the SCAQMD Priority Reserve. Mine Reclamation Corporation will need to hold a pre-application meeting with the SCAQMD staff to determine the extent to which the Priority Reserve will be able to provide the required offsets and the extent to which additional offsets will be required.

36. With one exception, all of the emitting equipment associated with the project was discussed in the draft EIS/EIR, Appendix E, pp. 75-90. This discussion included tables which showed the worst-case daily emissions from this equipment. A discussion of BACT requirements for project equipment was included in the draft EIS/EIR in Appendix E, pp. 103-105. Air quality modeling analyses, which reflected emissions from all project-related sources, are contained in the draft EIS/EIR, Appendix E, pp. 92-96. Mitigation Measure AQ-9 has been revised to include a feasibility study to evaluate the potential for use of diesel engines with SCR or natural gas fuels to reduce locomotive NOx emissions associated with the Eagle Mountain railway.

    The one exception is that emissions from diesel fuel storage equipment was omitted. Table FEIR-AQ-3 (Appendix M, Attachment 2 of the final EIS/EIR) shows the expected emissions from this storage equipment. Since diesel fuel has extremely low volatility, the emissions associated with this equipment are considered negligible compared with overall project emissions. Consequently, the inclusion of emissions estimated for diesel fuel storage does not change any of the conclusions contained in the draft EIS/EIR regarding air quality impacts.

37. Regulation XVII is the SCAQMD's Prevention of Significant Deterioration rule, designed to ensure that air quality in clean air areas (where national ambient air standards are not exceeded) does not significantly deteriorate while maintaining a margin for future industrial growth. Although this regulation has been adopted by the district, it will not take effect until approved by the U.S. Environmental Protection Agency.

    The structure of Regulation XVII is similar to that of EPA's PSD regulations, which are discussed in the draft EIS/EIR. However, many aspects of Regulation XVII are more stringent than the corresponding federal requirements. In particular, Regulation XVII triggers PSD review of new non-NSPS projects at 40 tons per year, while the federal PSD trigger level is 250 tons per year. Once PSD review is triggered, however, the requirements of Regulation XVII and of the federal PSD regulation are identical.

The requirements of Regulation XVII will be applied in addition to, rather than in place of, the SCAQMD's New Source Review requirements of Regulation XIII. Since the New Source Review requirements are generally more stringent than those contained in Regulation XVII, project emissions would be generally unaffected by the additional requirements of Regulation XVII.

Recent discussions with EPA's Region IX office indicate that it is unclear when Regulation XVII will be approved and become effective. If the project satisfies the current federal PSD requirements before Regulation XVII is approved, the SCAQMD regulation would not apply to this project. However, as stated above, this would not be expected to affect project emissions due to the overriding stringency of the district's New Source Review regulations.

38. The risk assessment has been revised to reflect the use of on-site meteorological data and updated unit risk values. The revised assessment is included as Attachment 9, Appendix M of the final EIS/EIR. The maximum cancer risk is estimated to be 2.2 in 1 million at maximum concentrations of trace contaminants and maximum gas production. The most probable cancer risk is estimated to be 1.0 in 1 million, when the average concentrations are used with the maximum gas production. These would be the risks in the community of Eagle Mountain.

39. The unit risk factors presented in the draft EIS/EIR were taken from the Air Toxics Assessment Manual prepared by the California Air Pollution Control Officers Association (CAPCOA) in December 1989. The factors provided by the SCAQMD are taken from the AB 2588 guidelines prepared by CAPCOA in January 1991. The unit risk factors suggested by the SCAQMD reflect more recent toxicological information than the factors used for the screening level risk assessment summarized in Tables 31 and 32 of Appendix E. Therefore, as requested by the district, the risk assessment has been revised using the new unit risk factors. The revised tables (9-2 and 9-3) are included in Attachment 9, Appendix M of the final EIS/EIR.

40. As discussed in Response 0003-38, the risk assessment has been revised to reflect the use of on-site meteorological data and updated unit risk values. The worst-case cancer risk is estimated to be 2.2 in 1 million. South Coast Air Quality Management District Rule 1401 provides that a project may be approved, if the project uses best available control technology for toxics and the cancer risk does not exceed 10 in a million.

41. The analysis in the draft EIS/EIR was prepared based on an analogous guidance document prepared by the California Air Pollution Control Officers Association. The principal differences between the two sets of guidance documents are:

    a. The SCAQMD guidance includes a screening approach based on stack height and distance to the nearest receptor; no air quality dispersion modeling is necessary for this approach. The procedure is not valid for emissions from non-point sources (e.g., the landfill) in complex terrain in rural areas, so it cannot be used for the Eagle Mountain landfill project.

    b. The SCAQMD guidance includes a list of plausible worst-case assumptions to be used in a multi-pathway risk analysis. A multi-pathway analysis was not needed for the risk assessment in the draft EIS/EIR because all the substances considered were volatile organic gases, which do not enter the human body through ingestion (digestive) pathways.

    c. The unit risk factors in the SCAQMD document reflect more recent toxicological information than the factors in the CAPCOA guidelines. See Response 0003-39.

    d. The SCAQMD guidance requires an analysis of the cancer burden (number of potential cancer cases in the exposed population), if the cancer risk is greater than 1×10^{-6}. The CAPCOA document discusses the methodology for such an evaluation, but it leaves to the air districts the option to require that the cancer burden be calculated. To comply with SCAQMD guidelines, the cancer burden has been evaluated in the revised risk assessment (see Response 0003-38 above). Other than these differences, the SCAQMD and CAPCOA risk assessment guidances use the same approaches.

42. The health risk assessment has been revised, as described in Attachment 9, Appendix M of the final EIS/EIR.

    The risk assessment will be required as part of the application for Permit to Construct and Permit to Operate for the landfill gas collection and disposal system.

43. The draft EIS/EIR contains a discussion of project design features which will be used to minimize fugitive dust emissions (Appendix E, pp. 85-90, 123-124). Dust mitigation measures were included in the draft EIS/EIR in Appendix E, pp. 129-130. Additional dust mitigation measures included in Table FEIR-AQ-2 of the final EIS/EIR (Appendix M, Attachment 2), based on comments from the SCAQMD, are discussed in the revised Mitigation Reporting/Monitoring Program (see Section II.C. of the final EIS/EIR).

For a discussion of odor impacts and mitigation, please refer to Response 0001-97.

44. Mitigation Measure AQ-16 requires that wherever available, electric versions of landfill equipment such as overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative-fuel technology will be used depending on air permitting standards. The draft EIS/EIR shows that the emission reductions associated with the electrification of this equipment is approximately five percent of the emissions associated with landfill equipment. The actual emissions reductions associated with electrification are shown in Table FEIR-AQ-4 (see Appendix M, Attachment 2 of the final EIS/EIR).

    Electrification of the 52-mile stretch of track between Ferrum Junction and the landfill site was found to be potentially feasible. Mitigation Measure AQ-10 requires the preparation of a feasibility analysis for electrification at such time as when there is sufficient landfill gas to generate the electricity. If electrification is then found feasible, the reductions in locomotive emissions that could be achieved are shown in Table FEIR-AQ-5 (see Appendix M, Attachment 2 of the final EIS/EIR).

45. The feasibility of railway electrification is discussed in Appendix E (pp. 116-117) for the 52-mile stretch of track between Ferrum Junction and the landfill site. Electrification of the Eagle Mountain rail line is not considered feasible at this time because of the steep grades and several major turns in the rail line (page 386 of the draft EIS/EIR). Also, the costs and physical disturbance necessary for the installation of the catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures (AQ-10). The electrification of the Eagle Mountain railway will be evaluated when sufficient landfill gas is generated to provide the required electrical energy. Table FEIR-AQ-5 (Appendix M, Attachment 2 of the final EIS/EIR) shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

    Electrification of the Southern Pacific main line was not evaluated as a mitigation measure because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. While at the present time both the California Air Resources Board and the South Coast AQMD are exploring ways to reduce locomotive emissions, including options for electrification of the Southern Pacific main line, the effects of such potential regulations are at this time considered remote and speculative.

46. See Response 0003-45 above.

47. The screening of hazardous materials in the waste stream will be the responsibility of the transfer stations and materials recovery facilities as required by the solid waste facilities permits. This process is described on pages 48, 49, 331, and 332 of the draft EIS/EIR. Also, see Response 0001-117. The review of the California Integrated Waste Management Board in approving solid waste facilities permits and a load-check program where the County of Riverside has inspection rights for all solid waste coming to the project will monitor this requirement.

48. See Response 0003-47 above.

49. See Response 0001-117.

50. A typical day's operation of the landfill is provided on pages 34-35 of the draft EIS/EIR. The remainder of the project description is broken into:

    a. Landfill site facilities (pages 35-44)

    b. Roads, landfill site, and railroad preparation (pages 45-48)

    c. Landfill operation (pages 48-73)

    d. Closure and post-closure (pages 73-74)

    Section IV.O., Energy Consumption/Generation (pages 572-584 of the draft EIS/EIR), discusses, to the extent possible, types of equipment required for transport, transfer, handling, and disposal of refuse at the landfill (see Table 50). Estimates of their fuel consumption are shown in Tables 51, 52, and 53. It should be noted that based on public and internal review of the draft EIS/EIR, revisions have been made to the Energy Consumption/Generation section. These revisions are noted in Section VI.G. of the final EIS/EIR. Section IV.D., Air Quality, reiterates the types of activities relative to the operation of the landfill, focusing on their fuel consumption and air emissions (see pages 372-379 of the draft EIS/EIR).

51. All equipment expected to be used during the operation of the Eagle Mountain project is described in the draft EIS/EIR, in Appendix B, and again in Appendix E (pp. 70-90).

52. Emissions from the listed equipment are shown in the draft EIS/EIR (Appendix E, pp. 78-79).

53. The Eagle Mountain project will be required to comply with all applicable requirements of the California Air Resources Board with respect to both on- highway and off-road

equipment. In addition, Mitigation Measure AQ-13 requires that to the extent feasible, all landfill equipment should be equipped with on-highway engines which have been certified by the California Air Resources Board. This measure has been revised in the final EIS/EIR to require that these engines meet 1991 Air Resources Board standards.

54. This recommendation is included in the draft EIS/EIR as Mitigation Measures AQ-5 (State Low-Emission Vehicle Regulations), AQ-13 (On-Highway Engines for Landfill Equipment), AQ-14 (Low-NOx Engine Design for Landfill Equipment), and AQ-15 (Construction Equipment Emission Standards).

55. Internal combustion engines are identified as only one potential means of generating electricity using landfill gas. Mitigation Measure AQ-17 requires Mine Reclamation Corporation to perform an analysis of the feasibility of using landfill gas to generate electricity when the LFG generation rate exceeds five million cubic feet per day. This measure has been revised to explicitly require that the analysis consider the use of best available control technology for equipment selected to generate electricity.

56. All of the air quality mitigation measures discussed in the draft EIS/EIR are included in the Mitigation Reporting/Monitoring Program in summary form. The program has been revised to explicitly reference the number of the mitigation measures, taken from the restated air quality mitigation program found in Section II.C. of the final EIS/EIR, for easy cross-reference.

57. This measure is not applicable to waste-hauling trucks, since they will all be containerized. The mitigation measure calling for a freeboard height of two feet has been added in the final EIS/EIR as an additional mitigation measure for all trucks carrying lining and cover materials.

58. All applicable mitigation measures from Table 1 of the SCAQMD's comments have been incorporated into Table FEIR-AQ-2, included in Appendix M, Attachment 2 of the final EIS/EIR.

59. No significant traffic impacts have been identified in the draft EIS/EIR; consequently, no traffic mitigation is required.

60. Since rail haul of waste is less expensive, truck traffic is not anticipated to increase with time over the lifetime of the project. Truck traffic is principally expected to be used for waste obtained from transfer stations located in the desert portion of Riverside County and from other sites during the initial start-up stage of the project. Thus, VMT is expected to decrease over the life of the project.

DOCUMENT 0004 Letter from City of Banning, August 1, 1991

1. Projections in the 1989 South Coast Air Quality Management Plan incorporate assumptions adopted by the Southern California Association of Governments in the Regional Growth Management Plan. These plans call for implementation of a "jobs/housing" balance strategy which involves achieving a target ratio between the growth in primary employment and the growth of housing units within the various subregional areas in the SCAG sphere of influence, some of which are under the jurisdiction of the South Coast Air Quality Management District. The ratio reflects performance goals that demonstrate progress leading to reduced work-related commutes and improved air quality, and it is primarily based on, and related to, regional transportation and land use patterns, not on localized pollution concentrations. Banning is located in the Central Riverside County urbanizing subregional area, for which the projected, manageable increases are 139,700 jobs and 168,800 housing units between the years 1984 and 2010. These targets will not be affected by the project. In addition, the project is consistent with the concept included in AQMP measure D-2, "Out-of-Basin Transportation of Biodegradable Solid Waste."

2. From Response 0004-1 above, it is clear that the project will not directly or indirectly affect land use planning targets for Banning. The air quality impacts of the project are recognized in the draft EIS/EIR. The indirect effects on society and the economy due to air pollution are regional or, in some cases, global in nature and are the basis for all statutory efforts to reduce air pollution. Health and other effects are summarized in the AQMP (SCAQMD 1989:1-3 through 1-5) and not repeated in the draft EIS/EIR.

3. The discussion of noise impacts (page 543) indicates that at maximum operation, 12 trains per day would increase Community Noise Equivalent Levels along the Southern Pacific rail line by approximately 0.7 decibel. This result is less than the uncertainty of typical noise calculations and less than what can normally be discerned by people. The increase, therefore, is not considered significant and would not increase mitigation requirements for any other projects located along the rail line.

4. If recyclable materials are stored at the project site, returning trains would occasionally transport them back from the project site to the metropolitan area. Beyond that measure, it is unknown whether or not the increase of east-to-west rail traffic would promote the development of a new container handling yard for truck-to-train transfers or the development of any other uses that would take advantage of the rail service associated with the project. Southern Pacific and other rail companies already provide rail transport into, as well as out of, the southern California region. It is, therefore, not clear that the availability of empty containers traveling westbound would improve transport service. Because of the speculative nature of such discussions, they were not included the draft EIS/EIR.

DOCUMENT 0005 Letter from City of Banning, August 8, 1991

1. The transportation appendix (Appendix D) referenced discussions with the Public Utilities Commission staff in which excessive rail-caused delays were identified in the Alameda corridor serving the Port of Los Angeles. The delays in this area were used as the benchmark to identify significant impacts for rail-caused delays in surface street traffic (Appendix D of the draft EIS/EIR, page 14). For the city of Banning, the four at-grade crossings in question (Sunset Avenue, 22nd Street, San Gorgonio Avenue, and Hargrave Street) would experience cumulative delays ranging from 0.06 to 0.11 vehicle hour, much less than the 1-3 vehicle hours used as the benchmark. The maximum average delay for a single vehicle at any one grade crossing in Banning would be one minute. This delay time is not considered a significant impact, and hence, no mitigation is required.

2. See Response 0005-1. The reconstruction of two (2) at-grade crossings in Banning is not required or recommended in the draft EIS/EIR.

DOCUMENT 0006 Letter from Dorothy Harte, July 29, 1991

This letter was mailed to both the Riverside Planning Department and the Bureau of Land Management area offices. The concerns expressed in these letters are similar in nature and thus, for the sake of economy, appear only once in the final EIS/EIR and are addressed below. All letters submitted are on file at the County and the BLM area offices.

1. Pages 4 and 106 of the draft EIS/EIR discuss the recently enacted state legislation (AB 939) which establishes a mandatory program to divert residential solid waste from the landfills through recycling and waste reduction programs. Toward this end, the City of Los Angeles has recently adopted an ordinance which requires the diversion of recyclable municipal materials, though industrial and high-density residential waste is excluded. These measures have been taken to reduce the amount of solid waste entering our landfills. Additional waste diversion programs are identified in the draft EIS/EIR (pages 108 and 109), including recycling, yard waste composting, and source reduction. However, the need for a large-scale or a number of smaller-scale landfill projects in the region would still be present. Therefore, waste diversion programs are considered but eliminated from detailed analysis as feasible alternatives to the proposed project in the draft EIS/EIR.

2. The project description of the draft EIS/EIR (page 13) proposes to transport a maximum of 20,000 tons per day of solid waste generated from Los Angeles, San Bernardino, Riverside, and Orange counties to the proposed landfill. Additionally, the proposed project is a Class III landfill which would only accept nonhazardous municipal solid waste.

3. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

4. Please refer to Response 0006-1 above.

5. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

6. Please refer to Response 0006-1 above. Also, Section I.B. of the draft EIS/EIR (page 4) discusses the purpose and need for the proposed project.

DOCUMENT 0007 Letter from Hon. Steve Clute (Assemblyman D-68, Riverside County), July 30, 1991

1. This comment refers to the fact that not all truck impacts resulting from the project can be quantified (as explained on page 155 of the draft EIS/EIR). To clarify the truck impacts at this stage of the project, the letter proposes three options regarding truck traffic. Each option is addressed in the responses below.

2. Option 1. Eliminate the trucking component of the project entirely. The Proposed Action with Rail Access Only alternative (page 75 of the draft EIS/EIR) describes this alternative. The impacts associated with this alternative are described for each issue in the Environmental Consequences section starting on page 317.

3. Option 2. Require all trucks associated with the project to use cleaner fuels. The mitigation measures proposed in the Air Quality section of the draft EIS/EIR call for all trucks, trains, and on-site equipment to use fuels which comply with all applicable California Air Resources Board regulations. These measures may be found in pages 379-385 of the draft document. Application of this requirement to on-highway trucks in conjunction with other regulatory programs of the CARB and SCAQMD is discussed in the air quality appendix (Sierra Research 1990:105-108).

   A brief explanation of why new emission reduction technologies are not yet feasible is included in the draft EIS/EIR on pages 385-386. However, should any of these technologies be required by applicable federal, state, or local regulations, the applicant would take steps to comply with these regulations as expeditiously as possible. Given the duration of the project, the application of some of the technologies is likely, but it is not possible to predict which additional control measures may be required or at what point in time.

4. Option 3. Reduce truck traffic to 50 or fewer. Two alternatives to the proposed action are described in the EIS/EIR (pages 74 and 75) which would reduce the daily truck

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volume associated with the proposed landfill. At maximum operations, the Reduced Landfill Operations alternative would reduce the daily volume of solid waste entering the landfill via truck from 4,000 tons per day to 2,000 tons per day. Daily truck volume would be reduced from 200 to 100. The Proposed Action with Rail Access Only alternative would eliminate the use of refuse hauling trucks to the proposed landfill site. Project impacts associated with these alternatives are addressed for each issue in the Environmental Consequences section of the draft EIS/EIR starting on page 317.

It should be noted that since the preparation of the draft EIS/EIR, MRC has proposed that truck traffic to the project site be reduced from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This would account for total traffic on Eagle Mountain Road and its extension of up to 285 daily trips, which includes not only trucks transporting refuse but also employee travel and delivery and service vehicles. This is not considered a significant traffic impact. See Section II.B.2 of the final EIS/EIR for a discussion on the modification in truck traffic.

5. A detailed discussion of potential measures to reduce diesel electric locomotive emissions is included in the air quality appendix (Sierra Research 1990:108-116). Measures believed applicable to the project are identified in the draft EIS/EIR on page 380. Other measures in the research stage are noted in the draft EIS/EIR (page 385) and described more fully in the air quality appendix. In addition, Mitigation Measure AQ-9 has been revised to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce locomotive NOx emissions associated with the Eagle Mountain railway. Mitigation Measure AQ-9 is contained in the Mitigation Reporting/Monitoring Program located in Section II.C. of the final EIS/EIR.

DOCUMENT 0008 Letter from Clifford D. Threm, July 27, 1991

This letter was mailed to both the Riverside Planning Department and the Bureau of Land Management area offices. The concerns expressed in these letters are similar in nature and thus, for the sake of economy, appear only once in the final EIS/EIR and are addressed below. All letters submitted are on file at the County and the BLM area offices.

1. Potential site suitability is not related to decomposition rates, which vary greatly in landfills.

2. Uses of groundwater in the Chuckwalla Basin are described on pages 115 and 137-141 of the draft EIS/EIR. Potential impacts are discussed on pages 318-320, control measures are discussed on pages 320-322, and monitoring and enforcement responsibility are

discussed on pages 322-323. Given the control and enforcement measures proposed, the draft EIS/EIR concludes that groundwater impacts would not be significant.

DOCUMENT 0009 Letter from City of El Segundo, July 25, 1991

1. The increased emissions to both the South Coast Air Basin and the Southeast Desert Air Basin caused by the transportation of solid waste materials to the Eagle Mountain landfill are analyzed in the draft EIS/EIR and are found to be significant and not entirely mitigated. More detailed analysis and regulation of some emissions will be part of the SCAQMD permit process applicable to the project.

DOCUMENT 0010 Letter from Rolfe E. Tandberg, July, 19, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR; however, to correct some misinformation in the letter to Mrs. Briggs, it should be noted that the project is southeast of Joshua Tree National Monument and at its closest point is approximately 8,000 feet south of the boundary. The risk, if any, from toxic air contaminants associated with the project would occur in the community of Eagle Mountain, not in Joshua Tree National Monument or the community of Joshua Tree, which is approximately 60 miles to the northwest of the project site. See Response 0003-1.

DOCUMENT 0011 Letter from Edith Christopher, August 5, 1991

1. The suggestion made in this comment to use existing landfill sites as recycling and waste recovery centers falls under the category of project alternatives called Waste Diversion Programs in the draft EIS/EIR (page 105). The specific idea of establishing recycling centers at existing landfills is discussed on page 107. As with other waste diversion programs, the draft EIS/EIR concluded that there will continue to be a need for additional landfill capacity in southern California even with the full implementation of feasible recycling programs. For this reason, this category of alternatives was not analyzed in detail.

DOCUMENT 0012 Letter from Lilly and Manuel Romero, July 25, 1991

1. The draft EIS/EIR concludes that the air quality in both the South Coast Air Basin (Los Angeles) and the Southeast Desert Air Basin (Coachella Valley) will be degraded by increased emissions resulting from the project's truck and train traffic and on-site equipment. Prevailing winds are generally from the west to the east; emissions generated on-site, therefore, would not be expected to regularly affect the Coachella Valley.

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Emissions from trains and on-highway trucks, however, would contribute to air pollution levels in Coachella Valley.

DOCUMENT 0013 Letter from Eagle Mountain Landfill Evaluation Committee, July 8, 1991

This document was mailed to both the Riverside Planning Department and the Bureau of Land Management area offices; however, for the sake of economy it appears only once in the comment letters in the final EIS/EIR and is addressed under this document number below.

1. This newsletter is a brief synopsis of several public meetings sponsored by the Eagle Mountain Landfill Evaluation Committee outlining the major issues which this committee intends to examine in the draft EIS/EIR. It does not comment on the adequacy of the draft EIS/EIR and does not require a response at this time.

DOCUMENT 0014 Editorial from *The Press Enterprise,* date of publication August 2, 1991

1. Document 14 is a set of two editorial letters which apparently address the concerns of the individual who sent them. The issue of an accident involving a Southern Pacific train carrying trash is discussed in the draft EIS/EIR (pages 352-353). The issue of transporting solid waste from outside the county of Riverside for disposal inside the county is a policy question which must be decided by County officials. See page 9 of the draft EIS/EIR.

DOCUMENT 0015 Letter from California State Lands Commission, August 5, 1991

1. This comment correctly adds detail to the text at the end of Section III.E. of the draft EIS/EIR by making reference to lands within the project boundary which fall under the jurisdiction of the State Lands Commission (SLC). This paragraph should read as follows:

    e. State Lands Commission (page 191 of the draft EIS/EIR). The State Lands Commission (SLC) staff has determined that there are State interests in certain parcels within the area of the Eagle Mountain project of the Mine Reclamation Corporation. In particular, the project appears to involve the following state-owned lands and interest in lands under the jurisdiction of the SLC:

SLC Parcel No.	Description/Subdivisions	Interest	Assessor's Parcel No.
233-011	T3S, R13E, S36, SBM; Lots 1, 2, 3, 4, 6, 7, 8	Full Fee	701-32-05, 06, 21, 22
233-577	T3S, R14E, S36, SBM; Lots 1-11, N2NW4, W2NE4	Reserved Minerals	701-38-06, 07, 15
236-540	T6S, R14E, S16, SBM; W2W2	Reserved Minerals	811-08-07
237-523	T7S, R12E, S36, SBM; SE4NW4	Reserved Minerals	719-13-02

These state-owned lands are part of the State's School Land Grant and are managed, by law, for the economic benefit of the State Teachers' Retirement System (STRS). A lease or permit will be necessary for their use in the proposed project.

2. There are no materials recovery facilities or transfer stations proposed with this project or authorized by any discretionary permits anticipated for this project (see pages xx and xxi in the draft EIS/EIR). Precise locations, designs, and operational details for future MRFs are unknown at this time. For these reasons, the effects of MRFs are considered secondary or indirect effects of the project. In order to address these effects to a reasonable extent, a typical network or scenario for MRF locations was assumed (see page 150 and Figure 49). The operation of a typical transfer station is discussed on pages 48-49 of the draft EIS/EIR. The environmental effects of the transfer stations are analyzed to the extent reasonably possible, in discussions on pages 311-312, 344, 351, 353, 356-358, 360, 373-374, 387, 391, 540, 572, 579, and 600. If an existing transfer station's capacity to accept waste is increased due to establishing a contract to haul waste to Eagle Mountain, additional environmental evaluation would be required.

3. See Response 0015-1 above.

DOCUMENT 0016 Letter from City of San Bernardino, August 14, 1991

1. It is estimated that approximately one-half of truck transported waste would come from within Riverside County and the other one-half from San Bernardino County (draft EIS/EIR page 362). It should be noted that since the preparation of the draft EIS/EIR, the truck portion of the proposed project has been reduced by one-half, from 200 to 100 round trips daily. This means that truck traffic originating from San Bernardino County would amount to no more than 50 round trips a day. Furthermore, all truck traffic originating west of the Coachella Valley and the desert communities would be eliminated

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within three years of project commencement. See Section II.B.2 of the final EIS/EIR for a discussion of the proposed reduction in truck traffic.

The truck traffic using I-10 originating west of the city of San Bernardino will be direct hauling for approximately 150 miles to the landfill site at Eagle Mountain. Only on a rare occasion would such a hauler be likely to use the truck stop at the intersection of Hunt's Lane and Redlands Boulevard for such a short haul. Again, all of this traffic will cease after three years.

DOCUMENT 0017 Letter from Carol and Duane Johnson, July 31, 1991

1. See Response 0001-8 and 25 for a discussion of measures that would protect the area's groundwater resources from degradation. In addition, project phasing, the dry climatic conditions and waste characteristics, and the daily compacted soil cover of refuse would minimize the amount of leachate generated. Additionally, a thorough discussion of the discharge of water during mining operations and groundwater use in the project vicinity occurs on pages 118-127 of the draft EIS/EIR.

2. Although it is possible that gulls could be attracted to the landfill site, of greater concern is the regional raven population. Gulls confine most of their activity to the vicinity of water (i.e., Salton Sea, over 50 miles from the landfill site), whereas ravens, being more adapted to the desert environment, are likely more wide-ranging. Gulls have not been documented to use the Desert Center landfill currently in operation, but ravens are known to be present. Also, gulls have never been documented to prey upon the desert tortoise, whereas, ravens have. The mitigation plan for the project involves monitoring programs for tortoise and raven populations and a raven control program. Mitigation measures proposed for raven control will be implemented in at least two phases, a passive and an active phase. The passive control phase involves daily trash burial, hazing, and possibly the use of a new bird repellent applied to the refuse. The active control phase would only be implemented if raven numbers continue to increase despite passive controls. Active control measures include raven nest destruction, possible capture and translocation of ravens, shooting, and poisoning. Should it become clear that gulls are posing a threat to the tortoise population, they could be included in the control program. Daily refuse burial and other control measures will greatly reduce the likelihood of large population increases of these birds. Discussions of these mitigation plans are found on pages 447-451 in the draft EIS/EIR, pages 70-71 and 83-84 in the biological technical report (Appendix F). Also see the Biological Assessment (Appendix N of the final EIS/EIR).

3. The concentration of air pollution will be greatest at the landfill site, where evidence of desert tortoise activity is very meager. Most tortoise activity is south of I-10 and in Joshua Tree National Monument, where any landfill-generated airborne pollution will be significantly dispersed. Little or no scientific research has been conducted on the

tolerance of the desert tortoise, or the plants it forages on, to air pollution. Past mining activity generated dust and vehicle exhaust, as will the proposed landfill, but did not appear to significantly affect local vegetation. Gases generated by organic decomposition in the landfill are not corrosive and most will be collected and processed by a landfill gas collection system. No significant impacts to native vegetation, or the desert tortoise, are expected from air pollution generated by the proposed landfill.

4. As with the tortoise, little or no research has been conducted on the effects of air pollution on desert bighorn sheep. It is believed that once the proposed new water sources are installed for the sheep in the Eagle Mountains, they will spend much less time in the immediate vicinity of the landfill site, thus reducing exposure to potential air pollution. No evidence exists that sheep were significantly adversely affected by air pollution generated from past iron ore mining operations.

5. On the contrary, the primary air pollutants associated with past mining activities were particulates from ground disturbance and material handling, vehicle emissions from heavy equipment (although the mine also used several electric shovels), and locomotive emissions from ore trains. These are similar to landfill-generated pollutants. The landfill would also generate gas from decomposition of organic material, which is not expected to be corrosive. Landfill gas impacts and mitigation are discussed on pages 334-338, 376, and 382.

6. The existing Eagle Mountain rail line has been recently inspected and determined to be in relatively good condition and capable of supporting the anticipated train loads. Minor repairs, upgrades, and maintenance will be necessary prior to the commencement of rail operations. Specific activities associated with railroad operations are required and include track realignment and replacement, tie replacement, ballast regulation, culvert maintenance, bridge repair, vegetation control, oiler maintenance, and endangered species protection. The details of these activities are described on pages 46 through 48 of the draft EIS/EIR. The rail line would be inspected and maintained on a regular basis.

7. Train emissions were calculated based on estimates of fuel consumption, with corrections for locomotive types and grades, as discussed by Sierra Research (1990:75-76).

8. During the beginning operations of the landfill (Phase I), no more than one trainload of refuse per day and approximately 60 trucks per day would be incoming to the Phase I container handling yard. A description of this phase of the project's operation is provided on pages 35-40 of the draft EIS/EIR. Discussion of the updating of the railroad occurs on pages 46-48. The protection of the desert tortoise along the railroad is also discussed on page 48 and in the biological section (IV.G.1) of the draft document. It is possible that the Phase I container handling facility may be bypassed for use as a container handling area. Under this scenario, the Phase II container handling facility would be

constructed and used when the landfill first opens, and the Phase I area would instead become a maintenance area.

9. As described on page 50 of the draft EIS/EIR, the unit trains serving the landfill would consist of one or more locomotives carrying up to 14 railcars. Each train would be less than 4,000 feet long and carry approximately 3,500 tons of refuse. This length is somewhat shorter than most main line trains and approximately the same length as the trains previously used by Kaiser. The trainloads of solid waste material would be considerably lighter than those which transported iron ore during the former mining operations. The present track alignment for the Eagle Mountain rail line consists of heavy-gauge track which was originally installed to accommodate the heavy loads transported for mining operations and is considered more than adequate to bear the loads of the unit trains serving the landfill. In the event of derailment, the potential for a runaway train to occur would be minimal. Unlike the mining operations which transported the loaded trains downhill, the full trains en route to the landfill would be traveling uphill. If derailment occurs while transporting the refuse uphill, the train's ability to stop would be far greater than if the full load was going downhill.

   In the event of a rail accident, the emergency response plan would be enacted. Public Safety of the Public Health and Safety section (see pages 147-148 and 351-355 of the draft EIS/EIR) discusses the risk accidental spillage of nonhazardous compacted municipal waste poses to public health and safety. With implementation of mitigation measures such as providing staff to assist in the removal of spilled waste in the event of an accident, public safety impacts due to accidental spillage would be below a level of significance.

10. Subsequent to publication of the draft EIS/EIR, MRC proposed that truck traffic to the project site be reduced to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). See Section II.B.2 of the final EIS/EIR for a discussion of the proposed reduction in truck traffic. The increased truck traffic on Indio hill on eastbound I-10 due to the proposed project (100 trucks) would amount to approximately one percent of the average daily traffic. This is not considered a significant traffic impact. Please see pages 362-363 of the draft EIS/EIR.

11. See Response 0012-1. Emissions from on-highway trucks associated with the project were estimated in the draft EIS/EIR and are summarized in Table 25 and in Table 28 of Appendix E. This table has been revised as Table 28 in Appendix M, Attachment 5, of the final EIS/EIR. The reduction of truck traffic from 200 to 100 trucks would reduce air quality impacts resulting from the proposed project, but not to a level below significance. The air basins in which the project occurs would continue to be in nonattainment even without the project.

12. All trucks used in the project would be required to meet federal, state, and local operating standards. These trucks will not be "average trash trucks" or conventional compactor-haulers that provide local trash collection services. As explained throughout the report, they would be heavy-duty truck and semitrailer combinations similar to those commonly in use for long-haul truck transport.

13. Maintenance by Caltrans of the state highway system is funded by fuel taxes and other sources. Economic effects of the project relative to the county of Riverside are discussed on page 476 of the draft EIS/EIR. A fiscal analysis of the proposed project's effect on the County by the County of Riverside Administrative Office concludes that there will be a net positive fiscal benefit. This analysis was presented to the County Planning Commission on February 26, 1992, in a public hearing.

14. The capacity of the project (20,000 tons per day) was established based on projected operating parameters at the proposed landfill site, not on anticipated waste generation in Los Angeles County. Projections of solid waste flows and disposal capacities in the various southern California counties are summarized on pages 4-5 of the draft EIS/EIR. Updated projections are provided in Section I.B. of the final EIS/EIR. Please refer to Response 0006-1 for a discussion of state and local recycling programs and other efforts to reduce solid waste volumes. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program to ensure the adequate removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain.

    The County and MRC are currently discussing how to condition the project to continue to accept waste in the event of an emergency situation. If such an agreement is reached, refuse which has not been processed by a MRF may be accepted at Eagle Mountain under emergency circumstances only.

15. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

16. This does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

17. Dispersion modeling done for the air quality analysis used a worst-case analysis for local wind patterns and speeds and atmospheric stability. This is explained on page 408 of the draft EIS/EIR and in the air quality Appendix E (Sierra Research 1990:59-60). Since the draft EIS/EIR was completed, on-site atmospheric data was collected and is included in Appendix M, Attachment 7, of the final EIS/EIR.

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18. The issue of public health is discussed in various sections throughout the report (see Sections IV.B. and IV.D.3). This specific comment does not question the adequacy or accuracy of these discussions. No response is necessary.

19. The original application covered approximately 9,800 acres, but early in the processing of the applications it was decided to reduce the boundaries of the application to include only 4,695 acres. The remaining land, outside of the Specific Plan boundaries, remain under current zoning of M-R-A and are subject to the development standards established in the County General Plan for this area. The only permitted uses allowed would be those described in County Ordinance No. 348 for that zone, and those described in the General Plan's Open Space and Conservation designations of "Mineral Resources" and "Mountainous."

    Storage of containers on-site would be limited to Planning Area 4 of the Specific Plan (see Figure 16 in the draft EIS/EIR). This area would serve as a temporary storage for recyclable materials recovered from the waste stream at MRFs near the wasteshed for which there is no immediate market. Storage of the containers would be limited to this area. The details of this storage area are presented on page 41 of the draft EIS/EIR. Recyclables destined for Eagle Mountain will be shipped and stored in closed containers, identical with those being used for the shipment of waste. These containers will be prominently labeled as containing recyclables for storage. The rear closure on the container is a tight-fitting latched door that will prevent leakage. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. Recyclable materials having the potential to be stored at the site do not include chemicals, as suggested in this comment.

20. The draft EIS/EIR discusses wastewater disposal on pages 41, 65, and 529-530. Wash water will be collected and treated to make it suitable for reuse for dust control. The container washing process is discussed on page 41 of the draft EIS/EIR.

21. Issues raised in this comment do not relate to the contents of the draft EIS/EIR. The project proposal does not include the disposal of hazardous wastes on-site as implied by this comment. Waste Management, Inc. is a private company which is involved with the Amboy Railcycle project described on pages 81-86 of the draft EIS/EIR, not with the Eagle Mountain project. The Riverside County Waste Management Department is an agency within the Riverside County government. These are two separate and distinct entities. Also, while a great amount of inert solid waste left over from the mining operations is present throughout the project site, there has been no extensive dumping of household or municipal solid waste on the property.

22. See Response 0006-1. Collier County, Florida, has developed a process for recovering (mining) and recycling materials deposited in a sanitary landfill. The mined area has the

material removed from a vertical open face using a front-loader or a bucket type backhoe or shovel. LFG is dispersed in the open air. The mined material is moved to a separation and screening plant. The mined material is separated into (a) dirt cover material, (b) ferrous metal, (c) plastic, wood, and rubber, and (d) oversized reject material. The reject material is recycled to the plant. The dirt material is transported to the landfill where is reused as cover material. The plastic, wood, and rubber (primarily plastic material) is stockpiled for recycling or future fuel additive to a thermal resource recovery system. The ferrous metal is stockpiled for future sale.

As with other waste diversion processes, this process could extend the life of existing landfills; however, additional landfill capacity would still be required.

23. In the context of environmental impact documents, "mitigate" has a variety of meanings which go beyond the dictionary definition and which relate to avoiding, minimizing, reducing, or otherwise compensating for the adverse effects of a project, as described in California Code of Regulations Section 15370.

DOCUMENT 0018 Letter from City of Fontana, August 15, 1991

1. The Colton yard transfer station was used as a hypothetical location. See Response 0015-2.

DOCUMENT 0019 Anonymous flyer, received July 15, 1991

1. Please refer to Response 0006-1 for a discussion of state and local recycling programs and other efforts to reduce solid waste volumes. The Eagle Mountain project will only indirectly enforce compliance with MRF operators for the removal of recyclables (and hazardous waste) through the mechanism of not accepting residual waste unless the recyclables and hazardous wastes have been removed. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with authority of the local enforcement agency.

DOCUMENT 0020 Letter from Christine and Vince Samons, Vicky and David DaVall, Irene and Arthur DaVall, August 23, 1991

1. See Response 0001-25.

2. No significant traffic impacts are identified in the draft EIS/EIR due to the volume of truck traffic associated with the proposed project. See pages 362-367. In addition, since the preparation of the draft EIS/EIR, MRC has proposed a reduction in trucks from 200

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to 100 round trips daily, which would reduce further the effects of traffic. See Section II.B.2 of the final EIS/EIR for a discussion of the proposed reduction in truck traffic.

3. No significant train traffic impacts are identified in the draft EIS/EIR (see pages 356-362).

4. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

5. In compliance with the National Environmental Policy Act and the California Environmental Quality Act, the draft EIS/EIR provides a discussion of alternative sites to the proposed project (Section II.G., Analysis of Alternative Sites, page 77). A total of seven alternative sites are discussed in detail in the draft EIS/EIR. While NEPA or CEQA do not specify the number of sites to be addressed, a reasonable range of sites must be evaluated in those cases where consideration of an alternate is warranted. Five additional sites were considered but eliminated from detailed analysis (see page 105 of the draft EIS/EIR). No site near Rice, California, was considered.

DOCUMENT 0021 Letter from Sierra Club - Angeles Chapter, August 20, 1991

1. On-site atmospheric data was collected and is included in Appendix M, Attachment 7 of the final EIS/EIR. More importantly, the proposed project includes several operational procedures to control windblown debris. These are discussed on pages 514-516 of the draft EIS/EIR. They include portable litter fencing at each cell of the working face of the landfill, daily cover of at least six inches of soil, and daily compaction of the soil and deposited waste.

2. Evaporation of water from landfill refuse would not be expected to affect significantly local native vegetation. Given the aridity and wind conditions in the desert environment, it seems likely that evaporated moisture would be dispersed rapidly into the atmosphere and not alter significantly local ecological niches. Local desert flora currently exists in close proximity to standing ponds on, or in the vicinity of, the proposed landfill site with no apparent ill effects. Evaporation rates from these ponds are likely to be greater than that anticipated from the landfill.

3. See Response 0001-97.

4. The commenter is correct. The legend should read 6.5.

5. The small percentage of hazardous materials found in the current waste stream has not been processed through an MRF or transfer station. The draft EIS/EIR focuses not on the percentage but on the detection and appropriate disposal of hazardous materials

encountered in the waste stream. The load-checking program which removes hazardous waste from the wastestream is described as follows:

> Load-checking of incoming refuse would occur at the transfer station and MRFs to remove hazardous materials. Each transfer station and MRF would initiate their own load-checking program as required under the facility permit. However, as part of the proposed project, MRC would institute a periodic inspection program at the landfill to monitor the continued compliance and effectiveness of the load-checking programs. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the LEA (County of Riverside Department of Health).
>
> As part of the random inspection process at the landfill, the LEA will designate specific containers as loads for inspection. These containers will be diverted to the on-site waste inspection facility for thorough inspection. The origin of loads found not to be in compliance will be noted and appropriate actions taken. In the event that hazardous or other unacceptable materials are identified during the random inspection at the landfill, they will be removed from the site by properly licensed personnel. The responsible party will be notified that the wastes were illegally deposited at the site and will be charged for the disposal costs incurred. All incidents will be reported to the Colorado River Basin California Regional Water Quality Control Board at Palm Desert and the Riverside County Health Department.

6. A ballast regulator is a machine which is used to loosen, level, redistribute, and compact the stone and rock (ballast) along the side of and between the rail tracks. It rides on the rails while performing this function.

7. The draft EIS/EIR states on page 352-353 that in the event of rail service interruption, 650 trucks per day would be required to handle the portion of the refuse normally carried by rail at full capacity of 20,000 tons per day. However, prior to shifting to the use of 650 trucks, the draft EIS/EIR points out that a surplus of containers within the system can be used to load and store refuse temporarily at transfer stations or to store containers at rail sidings if the service interruption occurs during rail haulage. It is also possible to send refuse to other landfills until rail service is resumed. “This additional response would help ensure steady flow of refuse to the Eagle Mountain site or to alternate area landfills depending upon the location of the train disruption” (p. 353).

8. This comment is correct—truck traffic can be expected at any time on the Eagle Mountain Road and extension. MRC has proposed that truck traffic to the project site be reduced from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This would account for total traffic (including existing traffic at the MWD pump station) on Eagle Mountain Road and its extension of up to 285 daily trips. Most of this traffic would occur during daylight hours.

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See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic. The primary effect to wildlife would not be headlight glare, but physical impact with animals. The limited number of vehicles, the 35 miles per hour speed limit and driver awareness program will reduce such potential impacts to below a level of significance.

9. The draft EIS/EIR (page 363) states that the proposed project would generate a two percent increase in traffic on I-10. This incremental increase in traffic is not considered a significant traffic impact. Furthermore, since the preparation of the draft EIS/EIR, MRC has proposed to reduce the round trip truck traffic from 200 to 100 which would further reduce traffic impacts. The draft EIS/EIR (page 351) states that the project itself and the operation of off-site transfer stations to serve the project would not be expected to increase the frequency of accidents involving solid waste transport, when considered in terms of accidents per ton-mile of transport. Using the data referenced in Table 10, the following computation correctly states the potential accident rate comparison, using the following assumptions:

   a. The round trip distance is 150 miles for trucks. However, these vehicles are loaded only one way. This means that the ton-mile accident rates cannot be used directly.

   b. Landfill operations will only be conducted 312 days per year.

   2,000 tpd × 312 days × 75 miles = 0.046 billion ton miles per year at 56.6 truck accidents per year = 2.63 accidents per year.

10. Culverts have been installed in a few locations for tortoise use; however, to date, there have been no long-term scientific studies to determine their effectiveness. Anecdotal information exists indicating that tortoises will use culverts (e.g., presence of tracks, scats, etc.). The BLM has proposed a study of the effectiveness of culverts, but no data have been gathered. The proposal for culvert installation as mitigation for this project was based upon BLM recommendations in their draft report on desert tortoise mitigation measures. Part of the project Mitigation Reporting/Monitoring Program involves a monitoring program for the desert tortoise, including monitoring their use of culverts (see Section II.C. of the final EIS/EIR).

11. The recommendation to restock the site with the nearest suitable genetic strain of pupfish, in the event of a rail accident, was made by biologists at the BLM and CDFG.

    The probability of a rail accident at the Salt Creek rail line bridge is extremely low. During the approximate 40 years of operation of the Eagle Mountain Mine no train accidents occurred at this site. Reactivation of the rail bridge is not judged a significant impact, and the new environmental impacts associated with an alternate rail line route is not warranted.

12. It is generally estimated that the adit extension will be 250 feet in length. The pipe will rise at right angles to the present opening to avoid settlement forces. The bats are currently flying at least 4,000 feet into the mine tunnel to roost. An additional 250 feet is not expected to deter them from using the mine.

13. The response to this question is highly speculative. MRC would probably not recapitalize a substitute company. In the event of bankruptcy by the railway, it is not likely that rail service would be interrupted for very long because the Interstate Commerce Commission would be interested in retaining the rail service as it is part of a larger regional system.

14. The project as proposed does not include transfer stations. MRC may, in the future, develop the need to own or operate one or more transfer stations. If this is the case, MRC would be required to complete the environmental documentation and acquire appropriate local permits for each transfer station. At this point in time, MRC does not plan on owning the MRFs.

15. All loads of refuse destined for the landfill face at Eagle Mountain will pass through a radioactive detector (draft EIS/EIR, page 332). This highly sensitive radiation monitor will be maintained at the entry area. A constant digital readout will sound an audible alarm for radiation detected above 400 counts/minute. Typical background radiation ranges from 200 to 400 counts/minute. Monitors will be tested weekly and calibrated annually.

    Upon identification of a container in which there is suspected radioactive material, it will be off loaded at the tipping floor for inspection by workers using hand-held monitoring equipment. When located, the radioactive material will be manually removed to an authorized radioactive waste facility. All radioactive material, regardless of the level of radioactivity, is considered hazardous and will be removed from the waste stream upon detection. The Nuclear Regulatory Commission may reclassify certain low-level radioactive waste as below regulatory concern; however, the materials landfilled at Eagle Mountain must comply with Chapter 15 of the California Code of Regulations.

16. As a requirement of the new federal EPA regulations and RWQCB, MRC proposes that a composite liner consisting of a layer of low-permeability soil and a high density polyethylene flexible geomembrane be placed over the entire area underlying refuse. See Response 0002-4 and Section II.B.1 of the final EIS/EIR for a more detailed description of the liner characteristics.

17. The average railcar turnaround time of 28-29 hours is per train trip. It is not an average of trips over six or seven days.

18. Please see Response 0021-16.

19. Page 41 of the draft EIS/EIR discusses the storage of recyclable material at the site. The transport and storage of recyclable materials at Eagle Mountain is intended to be a temporary condition while recyclable markets are depressed or in development. Although, theoretically, 10,000 tpd of recyclables could be generated from the daily 20,000 tpd trash destined for Eagle Mountain, a substantial amount of that material will be immediately shipped to manufacturers which use the recyclables as feed stock. The storage of recyclable materials would occur in Planning Area 4 of the Specific Plan. The storage area could accommodate roughly 12,000 double-stacked containers (40 feet by 8 feet by 8 feet each). If each container were to hold 20-25 tons, this would represent 240,000-300,000 tons of recyclables.

    Recyclables sent to Eagle Mountain for interim storage will not be the property of the Eagle Mountain project, but rather the property of recycling firms or MRFs. They will be transported to the site by one of the six trains per day serving the landfill. When the owner requires return of the recyclables, they will be shipped back in one of the empty railcars returning from the site. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program to ensure the adequate removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain.

20. The entire landfill will be placed under negative pressure by means of the landfill gas extraction equipment. It was conservatively estimated that this control would recover only about 80 percent of the LFG produced. It was also assumed that the remaining 20 percent of the LFG would not be recovered for incineration in the flares and might be available for release into the atmosphere or groundwater. In fact, more than 95 percent of LFG is routinely recovered in modern recovery systems (see Response 0001-46). Because the entire landfill is under negative pressure, the formation of pockets of LFG is unlikely. Even if pockets do form, they represent no hazard because they will be fully contained within the landfill liner system.

21a. The laws of probability underlie the statistical nature of predicting hydrologic phenomena. By definition, a 100-year storm event is a level of expected rainfall intensity which has a chance to be reached or exceeded on the average of once in 100 years. In any one year, the probability of exceeding this level of precipitation is one percent. The recurrence interval is reciprocal of the annual probability of exceedence. For any given area, the intensity, duration, and frequency of rainfall has been charted by various agencies.

    The measure of the rainfall associated with a 100-year flood is made only to allow calculations of the volume of surface water runoff that must be accommodated in drainage works. Regulations specify that drainage works must be sized to accommodate the

100-year flood. It should be noted that the drainage facilities at Eagle Mountain will be sized to handle 100-year storm flows for the most critical events ranging from 1-, 3-, 6-, and 24-hour duration storms. In addition, a 500-year frequency standard will be adopted for review of channel freeboard design.

21b. Page 328 of the draft EIS/EIR gives a summary of expected water consumption associated with the landfill operations. For haul road dust control specifically, it is estimated that 1,650 acre-feet per year will be used. Wash water from vehicles and containers will be treated and, if suitable, used for dust control on unpaved roads or treated to make it suitable for reuse (draft EIS/EIR, page 41). This reclamation process will help reduce the overall water demand of the project.

22. Closure and post-closure costs must be borne by the operator (i.e., MRC) in accordance with both federal and state regulations (Subtitle D, and Chapter 15, respectively). Although the lease with Kaiser is for 99 years and the landfill life is 115 years, use after 99 years will not be allowed unless a lease extension or other arrangement is made with Kaiser. For planning purposes, it is assumed that a lease extension will be made.

23. See Responses 0001-111 through 0001-116. No surface drainage will be directed towards the open channel portion of the aqueduct. Drainage features designed to pass storm flows over the buried aqueduct will be engineered to minimize velocities, reduce erosion, and protect adjacent surface facilities. Drainage improvements affecting the aqueduct right-of-way must be approved by MWD.

Drainage runoff from active landfill and operation areas will not be directly mixed with drainage from natural areas. Runoff from areas of potential contamination will be directed to temporary detention facilities, tested and treated prior to release in accordance with current state and federal regulations. Waters to be released are storm waters that have been unaffected by the landfill operations. They will be released in existing channels that presently cross the aqueduct.

Possibility of contamination of water within the MWD aqueduct will be eliminated by position and design of proposed drainage facilities and by pretreatment of runoff which has come into contact with refuse.

24. The recyclable storage area will be policed weekly to ensure housekeeping and to remove any windblown litter that may have accumulated, not to remove the recyclable materials. The recyclable materials temporarily stored at the site would not be the property of the Eagle Mountain project but rather the property of the recycling firms or MRFs. The recyclables will be returned at the owner's request. No time frame for storage of these materials has been specified; however, it should be noted that the recyclables will not be placed in the landfill.

25. The intermodal shipping containers are 40 × 8 × 8 feet in size with a storage capacity of about 284 cubic yards of material or 25 tons of compacted trash (page 48 of draft EIS/EIR). The containers are not sealed in the sense that they are watertight. The rear closure is a tightly fitting latched door that will prevent the escape of refuse. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. Additionally, dripping wet refuse will not be placed in the containers. For these reasons, the shipping containers are not expected to leak or emit odors.

    The potential for refuse fires to occur during rail transport is quite low for two reasons, as described on page 342 of the draft EIS/EIR. First, all refuse in the project would be screened at transfer stations where notably burning or smoldering materials would be removed or extinguished. Second, in the compaction process prior to loading waste into the transport containers, voids or air pockets capable of supplying oxygen to support combustion would be greatly reduced. Thus, potential hazard of fires within the waste containers is not considered a likely or significant impact requiring mitigation.

26. Measures which contribute to the prevention of rail accidents are described throughout the draft EIS/EIR. They include the regular maintenance of trains and the inspection and maintenance of the track. In the event of a rail accident, the railroad's emergency response plan, already on file with the required administrative agencies, would be enacted.

27. Refuse destined for landfilling at Eagle Mountain must comply with the provision of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program for the removal of recyclables and hazardous materials. If refuse does not comply, it will not be landfilled at Eagle Mountain. If rail-based MRFs are not approved, it is anticipated that approved refuse will still be brought to the landfill by truck to the extent allowed in the project's operating permits. The waste inspection process is described on pages 331-333 of the draft EIS/EIR. Also, see Response 0008-2.

DOCUMENT 0022 Letter from City of Brea, August 19, 1991

1. This letter had no comments on the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0023 Letter from W.H. Rawlings, Inc., August 21, 1991

1. The proposed project would add a maximum of six trains per day. MRC will arrange scheduling of refuse unit trains with Southern Pacific on a contractual basis to prevent any conflicts between ongoing rail operations and trains being utilized for the landfill project (draft EIS/EIR, pp. 50, 51, 357). At-grade crossings are described in Section IV.C. of the draft EIS/EIR and are considered insignificant. See Response 0008-1.

2. According to Caltrans, preliminary studies for the undercrossing ramp and at-grade modification at Sunset Avenue have been conducted. The environmental analysis and clearance has yet to occur. Construction is tentatively scheduled for 1996.

DOCUMENT 0024 Letter from City of Rancho Mirage and Attached Resolution, August 26, 1991

This letter was mailed to both Supervisor Larson and the Bureau of Land Management area offices. The concerns expressed in these letters are similar in nature and thus, for the sake of economy, appear only once in the final EIS/EIR and are addressed below. All letters submitted are on file at the County and the BLM area offices.

1. These comments do not question the adequacy or accuracy of the draft EIS/EIR. They state that the City of Rancho Mirage has adopted a resolution opposing the Eagle Mountain landfill project due to the "risk of increased levels of air pollutants and the near certainty of ground water contamination." Off-site air impacts were discussed in Appendix E (pp. 72-75 and Tables 21 and 22) of the draft EIS/EIR. In response to other comments, the final EIS/EIR also presents this information specific to the Coachella Valley, where the City of Rancho Mirage is located (Appendix M, Figures FEIR-AQ-2 and -3). The potential for groundwater contamination is presented in the draft EIS/EIR on pages 318-323. Additional concerns of the Rancho Mirage City Council include binding assurances of revenue allocation to the desert area, binding assurance of the collection of a one-dollar tipping fee, and pass-through to the Coachella Valley Mountains Conservancy for acquisition and preservation of open space, retention of adequate capacity at the landfill to meet future County needs, truck traffic, and indemnification of the City from future claims and actions. Effects of truck traffic are presented in the draft EIS/EIR on page 363; and the capacity reservation for the County of Riverside is discussed on pages 4-5.

DOCUMENT 0025 Letter from City of Rancho Mirage, September 19, 1991

1. Based on the Riverside County Waste Generation Study dated June 14, 1991, an estimated 1,861,495 tons of solid waste was generated in Riverside County in 1990. On a six-day-per-week basis, this means roughly 6,000 tpd are landfilled daily in the county.

2. A comparison of the 2,000 tons per day reservation with projected waste generation for the county of Riverside, including both its incorporated and unincorporated areas, is part of the existing County Solid Waste Management Plan and the proposed successor to this plan, the County Integrated Solid Waste Management Plan, currently being prepared by the Riverside County Waste Management Department.

3. The project description includes transporting waste from four counties: Riverside, San Bernardino, Los Angeles, and Orange. If in the future San Diego County intends to use the Eagle Mountain landfill for solid waste disposal, a separate environmental document would be required to identify potential impacts resulting from this action.

4. See Response 0021-27.

5. See Response 0021-27.

6. The MOU is available at the Riverside County Planning Department, as are many other documents referred to in the draft EIS/EIR but not attached as an appendix.

7. The truck portion of the proposed project is very minor compared to the rail portion. MRC has proposed that no more than 100 truckloads per day be allowed to transport waste to the landfill. After three years, these trucks will serve only the desert area. See Section III.B. for a discussion of this project modification. In the event of a catastrophic closing of I-10, the trucks would simply wait until I-10 is opened or transport the waste to another landfill. It is expected that such occurrences would be infrequent and of short duration; therefore, the impacts would not be significant.

8. As the proposed project is a Class III nonhazardous solid waste facility, the transport of hazardous materials to the landfill site would not be permitted (page 48 of the draft EIS/EIR). Therefore, in the event of an accident, the potential hazardous material spilled would be limited to the miniscule amount of hazardous material in the refuse and fuel spilled from the vehicle itself. The small amount of hazardous waste in the refuse would be picked up by the same crews that pick up the refuse. Members of this crew will be trained in identification and handling of such material, and it will be handled, stored, transported, and disposed of in accordance with regulations. Contaminated soil and other materials will be disposed of in accordance with the applicable regulations.

   Hazardous wastes derived at the landfill (e.g., paints, fuel oil, and solvents from maintenance activities; the organic phases from leachate or landfill gas condensate; and small quantities of hazardous materials recovered from the on-site waste inspection facility) will be segregated and containerized as required by regulations and temporarily stored on-site. These wastes will be periodically removed from the site to a licensed hazardous waste facility by a licensed hazardous waste carrier under manifest as required by state law.

9. Operators and haulers are required to carry liability insurance against accidents. MRC will fund additional adequate insurance for the cleanup and environmental response to potential accidental spills. Also, see Response 0109-1.

10. The Riverside County Planning Department has on record a letter received from James O. Wallace, Agricultural Commissioner and Director of Weights & Measures, dated April 10, 1990. It states "that the provisions stipulated for the landfill operation at Eagle Mountain would not contribute to the artificial spread of a quarantinable pest [e.g., Mediterranean fruit fly (Medfly)]." See Response 0027-58.

11. See Response 0025-6.

12. This comment is accurate; however, all mitigations described in the MOU are also detailed, not referenced, in the draft EIS/EIR.

DOCUMENT 0026 Public Hearing: Palm Desert, August 27, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

2. See Response 0017-10 for a discussion of traffic impacts resulting from the proposed project. The number of railcars cited in this comment is grossly inaccurate. Page 50 of the draft EIS/EIR states that there would be a maximum of six trains per day serving the landfill under full-capacity conditions. Each train would consist of one or more diesel electric locomotives carrying up to 14 cars.

3. See Response 0017-9. Also, as required by the State Health and Safety Code (Div. 20, Ch. 6.95), Southern Pacific's Emergency Response Plan, Spill Prevention Control Contingency Plan, and Tier II Chemical Inventory Forms are filed every year with all administering agencies, including the health departments of Riverside and San Bernardino counties and the California Public Utilities Commission. In addition, General Order 161 of the California Public Utilities Commission (effective 8/7/91) requires Southern Pacific to file the emergency response plan, traffic density data by line segment, lease and storage inventories, and a list of 24-hour emergency contact telephone numbers with any emergency response agency (such as fire departments) within 60 days of receiving a written request from the agency.

   Neither Title 14, Chapter 3, of the California Code of Regulations (Minimum Standards for Solid Waste Handling and Disposal) nor Title 40, Part 241, of the Code of Federal Regulations (Guidelines for the Land Disposal of Solid Wastes) require MRC to file an emergency response plan. The procedures outlined in Section 241.211-3 of the CFR (Recommended Safety Procedures for [Landfill] Operations) have been incorporated already in the safety program discussed on pages 147 and 352 of the draft EIS/EIR.

   The emergency response plans would be enacted upon interruption of rail service due to a rail accident, rail strike, or other catastrophic occurrence. For instance, in case of rail accidents, the train crew will immediately notify the local fire and police departments as well as the STO (Supervisor, Train Operations) by the quickest means available. The crew will provide information on the specific location of the accident; the condition of the car(s); the location of people, property, or public systems (roads, power lines, etc.) which could be subject to damage; the location and condition of access roads to the accident site; and wind and weather conditions. While awaiting fire and police personnel, the train crew will assist in keeping people way from the emergency area and remain at the scene until relieved by a railway company operating officer, who will then coordinate the actions of the emergency response team.

As part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers to supplement Southern Pacific personnel and to help in trash pickup, as necessary. This provision, in conjunction with existing response plans, would provide adequate mitigation for the potential increase in rail accidents.

4. The waste screening station/inspection facility process is described on pages 39, 49, 331, and 332 of the draft EIS/EIR. Load-checking of incoming refuse would occur if the transfer station and MRFs were to remove hazardous materials (as well as recyclables). Each transfer station and MRF would initiate their own load-checking program as required under the facility permit and is not part of the proposed project. However, as part of the proposed project, MRC would institute a periodic inspection program at the landfill to monitor the continued compliance and effectiveness of the load-checking programs. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the LEA (County of Riverside Department of Health). MRC would not accept residual wastes at Eagle Mountain unless the hazardous wastes and recyclables have been removed.

5. During Phase I of the landfill, trains would use the existing Eagle Mountain rail line with no more than one train load of refuse being transported per day. Five locomotive engines would be necessary to haul the cars up to the landfill from Ferrum Junction located on the Southern Pacific line. During Phase II of the landfill, up to six train loads of refuse could be received per day. Again five locomotive engines would be needed to haul each train load. This information can be found in Section II.5 of the draft EIS/EIR.

6. The container handling yard that will receive the refuse will be operational 24 hours a day allowing the trucks and trains to use the yard 24 hours a day. As stated on page 362 of the draft EIS/EIR ". . . a more conservative scenario would be the arrival of truck shipments during daylight hours only (12 to 13 hours daily)." Section IV.D. of the draft EIS/EIR discusses air quality impacts resulting from the proposed project. Please refer to Response 0012-1.

7. This comment is incorrect. Section II.5 of the draft EIS/EIR (pp. 31, 49-50) states that the project allows a maximum of six diesel trains per day to travel from the west to Ferrum Junction and six diesel trains per day to operate between Ferrum Junction and Eagle Mountain. Only the locomotives are likely to change.

8. A portion of the proposed project is located in the South Coast Air Basin (SCAB) and a portion (the landfill itself) is located in the Southeast Desert Air Basin (SEDAB). Currently, the SCAB is a nonattainment area for ozone, nitrous oxide, carbon monoxide, particulate sulfates, and fine particulates (PM10), while the SEDAB is a nonattainment area for ozone and PM10. Therefore, the draft EIS/EIR must conclude that the air quality in both the South Coast Air Basin (Los Angeles) and the Southeast Desert Air Basin (Coachella Valley) will be degraded by increased emissions resulting from the project's truck and train traffic and on-site equipment and that these impacts will not be mitigated to below a level of significance. The commenter is correct that any landfill sited within either of these two air basins would exceed acceptable levels of several state and federal criteria pollutants.

9. The draft EIS/EIR discusses the project operation that would influence the amount of litter that might be windblown. It should be noted that the project's operation is quite different from conventional landfills. All waste entering the landfill must be processed for materials recovery and recycling away from the landfill and compacted into closed containers which must remain closed until the containers are opened near the face of the landfill. The waste will come out of the containers in large clumps or plugs and spread out by a compactor tractor. This refuse will be pushed to the face of the landfill where it will be compacted and covered with at least six inches of soil. This process will minimize the opportunity for the wind to pick up litter. Additionally, portable litter fencing at each cell will catch windblown litter. Also, full-time personnel will be assigned to litter control. Because the landfill site is quite large, the operator will be able to contain windblown litter within the site boundaries by intensifying the labor effort when necessary. Finally, the proposed project includes a storm warning system that would allow for the closing of landfill operations and the cover of litter prior to the arrival of a potentially windy storm. This process is discussed on pages 57 and 58 of the draft EIS/EIR.

10. See Response 0026-9 above. The potential for windblown debris and dust associated with the proposed landfill operations is addressed in Section IV.J.4 of the draft EIS/EIR. The design features listed on pages 515 and 516 of the draft EIS/EIR would ensure that the impacts due to windblown debris would be below a level of significance.

11. The air quality impacts resulting from the proposed project are identified in the draft EIS/EIR. See Response 0026-8 above.

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12. This comment concurs with the conclusions of the draft EIS/EIR. See Response 0026-8 above.

13. The visual effects of the proposed action are presented in Section IV.J. of the draft EIS/EIR. Currently, the project site is in a disturbed setting. The proposed landfill site would be located in an unused iron ore open pit mine which consists of open pit and surface mines, tailing ponds, plant operation and equipment areas, a sewage treatment plant, and a residential area associated with the mining operations. The present quality of the site is low. The proposed landfill operations would not result in further visual impacts to the area. The shape and mass of the landfill topography would blend in better with the adjacent landforms more than the existing graded areas do. In addition, the revegetative cover proposed over areas disturbed by the landfill would improve the existing visual quality.

14. A comparison of the emissions associated with each of the four project alternatives is shown in Figures 79-88 of the draft EIS/EIR for each of the criteria pollutants. Figures 84-88 provide additional information regarding the distribution of pollutant totals between the two air basins under the various scenarios analyzed. This discussion begins on page 395. Comparing all the alternatives with the No Project alternative in effect demonstrates that some criteria pollutants (CO, PM10, NMHC, and SOx), both in total and in SCAB, would be reduced. This does not mean that levels would be reduced below significance, however.

15. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

16. See Response 0026-8 above.

17. Please refer to Response 0001-25. To assure the effectiveness of these measures, a Mitigation Reporting/Monitoring Program has been developed for this project (see Section II.C. of the draft EIS/EIR). As part of the mitigation monitoring and reporting program, MRC will prepare design plans and specifications for the liner according to standards in Chapter 15, state regulations, as part of the Report of Waste Discharge and Report of Disposal Site Information for review and approval by the Regional Water Quality Control Board and the Local Enforcement Agency (Riverside County Department of Health).

18. Since the preparation of the draft EIS/EIR, MRC has committed to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). See Section II.B.2 of the final EIS/EIR for a discussion on the reduction in truck traffic. The desert cities are defined as those located east of Banning.

19. Operators and haulers are required to carry liability insurance against accidents. MRC will fund additional adequate insurance for the cleanup and environmental response to potential accidental spills.

20. See Response 0026-8 above. For a discussion of health risks, see Response 0003-40.

21. The draft EIS/EIR (page 369) states that in the areas regulated by the SCAQMD any new source point emissions are subject to the best available control technology. Measures that would achieve this requirement are listed on pages 379-385 of the draft EIS/EIR and in Section II.C. of the final EIS/EIR.

22. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

23a. Please refer to Responses 0001-25 and 0026-17 above.

23b. Pages 4 and 106 of the draft EIS/EIR discuss the recently enacted state legislation (AB 939) which establishes a mandatory program to divert residential solid waste from the landfills through recycling and waste reduction programs. The City of Los Angeles has recently adopted an additional ordinance which requires the diversion of recyclable municipal materials, though industrial and high-density residential waste is excluded. These measures have been taken to reduce the amount of solid waste entering our regional landfills. Upon achievement of these recycling goals, however, the need for a large-scale or a number of smaller-scale landfill projects in the region would still be present. The draft EIS/EIR (pages 108 and 109) discusses methods of reducing the amount of waste entering the regional landfills, including recycling, yard waste composting, and source reduction.

24. See Responses 0001-25 and 0026-17.

25. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

26. Page 476 of the draft EIS/EIR states that the benefits received by Kaiser Steel Resources retirees will be directly related to MRC's 99-year lease of the land, which is based on a percentage of the tipping fee for wastes disposed of at the site. Thus, to a large degree, the success of the proposed action and increase in stock value dictates the ability of Kaiser Steel Resources to fund the commitments. The trust owns 48 percent of the stock of Kaiser Steel Resources. The stock will be used to fund the trust. There is no guarantee as to the amount of benefits that will be realized from approval of the proposed project.

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27. This comment criticizes a statement in the draft EIS/EIR about the local groundwater quality as being an "opinion" which is not justifiable because of some facts about the groundwater near Blythe. First, the groundwater in the Desert Center area is not the same as the groundwater in the Blythe area. The groundwater near Blythe is heavily influenced by the Colorado River. Second, it is fact that the groundwater from the northwestern Chuckwalla Valley ". . . contains fluoride concentrations which are above the national primary drinking water standards" (page 131 of the draft EIS/EIR) and that the Riverside County Department of Environmental Health will require ". . . some sort of acceptable defluoridation scheme as part of the overall townsite facility plan" (page 530 of the draft EIS/EIR).

28. This comment does not identify where in the draft EIS/EIR there are conflicting statements. It appears that the commentor is confused between the characteristics of the daily and final cover. Given the dry conditions of the municipal solid waste that will be disposed at the site (see page 58-59 of the draft EIS/EIR) and the very dry climatic conditions at the site (annual rainfall averages three inches), the amount of moisture content in the landfill would be minimal. Additionally, refuse will be exposed to some drying influence and evaporation under the layer of daily cover (page 318 of draft EIS/EIR). The drainage plan for the site will divert all runoff away from the landfill as well as provide interim cover that is designed to prevent infiltration and percolation of rainwater that falls on the landfill. Only rainwater that falls directly onto the open face of the landfill operation will percolate through refuse. A final cover having a minimum thickness of two feet (consisting of a one-foot vegetative layer over one-foot clay layer) would be emplaced when the final grade of the landfill is reached. This surface would be very impermeable to rainfall. Thus, daily cover is permeable and final cover is not.

29. During development of more detailed design specifications for project construction, an engineering decision was made to design the leachate collection system using a blanket drainage system without pipes, rather than a series of interconnecting leachate collection pipes operating under a gravity system in the higher elevations and a pump system in the lower elevations as discussed in Section IV.F. of the draft EIS/EIR. Section II.B.1 of the final EIS/EIR detail this project modification.

    Since pipes will not be used, the potential for mineralization to occur would be eliminated. The gravel used in the blanket drainage system is extremely durable. It will be tested to show that it cannot be dissolved or attacked to any measurable degree by municipal solid waste.

30. See Response 0026-29 above.

31. See Response 0026-29 above.

32. See Response 0026-29 above.

33. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a high density polyethylene flexible geomembrane placed directly on top of a layer of low-permeability soil will be installed over the entire area underlying refuse. A composite liner is more effective than either a geomembrane alone or clay alone for containing leachate (Daniel 1990; Giroud and Bonaparte 1989b; U.S. EPA 1987). A composite liner represents the state-of-the-art in landfill liner system design.

    The potential for leakage in municipal waste landfill only exists if there is a sustained leachate head acting on the liner. As discussed in Response 0001-25, there will be very little leachate at Eagle Mountain. If there is no sustained leachate head, there is no potential for leakage. While there should be little or no leachate head on the liner, a composite liner will underlie the entire base of the landfill. Composite liners are capable of providing a very high level of leachate containment even when they are subjected to a significant sustained leachate head.

    See Response 0002-4 for a more detailed description of the liner characteristics.

34. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. However, to correct some misinformation, Eagle Mountain will not be the largest landfill in the world and the Chuckwalla Valley water basin is not California's second largest aquifer.

35. This comment is correct that the water gradient is from Eagle Mountain to the Colorado River.

36. See Response 0001-18 and 0001-35.

37. See Response 0021-7.

38. Regional efforts to reduce the amount of waste material entering the landfill have been implemented (see Response 0006-1). Alternative waste diversion programs to reduce the volume of the waste stream by diverting waste from the landfills are discussed on pages 105-109 of the draft EIS/EIR. These programs would not eliminate the need for new or expanded landfills in southern California. Therefore, waste diversion programs were considered but eliminated from detailed analysis in the draft EIS/EIR.

39. See Response 0017-22 above.

40. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

41. The intermodal shipping containers are 40 × 8 × 8 feet in size with a storage capacity of about 284 cubic yards of material or 25 tons of compacted trash (page 48 of the draft EIS/EIR). The containers are not sealed in the sense that they are watertight. The rear closure is a tightly fitting latched door that will prevent the escape of refuse. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. Additionally, dripping wet refuse will not be placed in the containers. For these reasons, the shipping containers are not expected to leak or emit odors. The draft EIS/EIR (page 41) states that the shipping containers will be washed as necessary at the repair and maintenance facility. See Response 0001-97 for a discussion of odor impacts. Also, see Response 0017-6 for a description of the existing railroad track and proposed improvements.

42. The unit trains serving the landfill would consist of one or more locomotives carrying up to 14 railcars. Each train would be less than 4,000 feet long and carry approximately 3,500 tons of refuse. This length is somewhat shorter than most main line trains and approximately the same length as the trains previously used by Kaiser. The train loads of solid waste material would be considerably lighter than those which transported iron ore during the former mining operations. The present track alignment for the Eagle Mountain rail line consists of heavy-gauge track which was originally installed to accommodate the heavy loads transported for mining operations and is considered more than adequate to bear the loads of the unit trains serving the landfill.

43. Trains crossed the California Aqueduct for 40 years. See Response 0026-3 above for a discussion of emergency responses for train accidents.

44. Please refer to Response 0026-41.

45. MRC will arrange scheduling of refuse unit trains with Southern Pacific on a contractual basis to prevent any delays in scheduling and to prevent conflicts between ongoing rail operations and trains being utilized for the landfill project. Loaded unit trains may await switching at Ferrum Junction for two to six hours, possibly up to one day. Please refer to Response 0001-97 for a discussion of odor effects from the refuse in-transit to the landfill site.

46. Our records show that Mr. William Bryne was sent a copy of the draft EIS/EIR in July of 1991.

47. The mitigation measures proposed in the air quality section of the draft EIS/EIR (pages 379-385) call for all trucks, trains, and on-site equipment to use fuels which comply with all applicable California Air Resources Board regulations. Additionally, mitigation measures presented on pages 380 and 381 of the draft EIS/EIR address alternatives to diesel engines and trucks, including the electrification of the Eagle Mountain rail line

and landfill equipment. In summary, when the landfill gas generation is sufficient to warrant the construction of an energy recovery facility at the project site, a cost/effectiveness study of electrifying the Eagle Mountain railway to reduce locomotive emissions shall be conducted. Also, in lieu of diesel-fueled versions, MRC shall purchase and use electric versions of as many types of landfill equipment such as overhead cranes, conveyors, crushers, and pugmills wherever available. Where not available, alternative-fuel technology will be used depending on air permitting standards. Other alternative measures to diesel fuel are evaluated in the draft EIS/EIR (pages 385 and 386; and Appendix E) but are not considered feasible at the present time. Please refer to Response 0007-5.

48. The Air Quality Management District is the enforcement agency for local air quality standards. The Air Resources Board establishes statewide air quality standards. The conclusion that the Air Resources Board is more realistic than the Air Quality Management District does not comment on the adequacy or accuracy of the draft EIS/EIR.

49. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

50. The project boundary's closest point to Joshua Tree National Monument is approximately 8,000 feet (roughly a mile and a half) to the southeast (page 188 of the draft EIS/EIR).

51. The proposed project is a Class III solid waste landfill which prohibits the acceptance of all toxic materials. Screening for hazardous materials will be required at the transfer stations and MRFs to remove any hazardous materials from the waste stream. Therefore, this comment regarding toxic spills is not relevant to the proposed project since the railroad will not be transporting hazardous materials to Eagle Mountain.

52. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

53. The container size would be 8 × 8 × 40 feet and would hold up to roughly 25 tons of waste material. It is unlikely that the containers will explode even at the most extreme desert temperatures.

54. See Response 0020-5.

55. See Response 0006-1.

56. See Response 0024-1.

57. See Response 0001-25 for a discussion of groundwater quality effects from the proposed project. Waste diversion programs are identified in the draft EIS/EIR (pp. 108 and 109), including recycling, yard waste composting, and source reduction. However, the need for a large-scale or several smaller-scale landfill projects in the region would still be present. Therefore, waste diversion programs are considered but eliminated from detailed analysis as feasible alternatives to the proposed project in the draft EIS/EIR.

58. The final design of the flexible membrane liner will mitigate conditions where design loads may cause tearing of the synthetic liner. Assurance of the integrity of the liner to protect groundwater can be found in Response 0001-25 and 0001-33. Impacts and mitigation measures for truck and train traffic are found in Section IV.C.; hazardous waste removal from the waste stream is discussed on pages 39, 49, 331, and 332; and the socioeconomic effects are discussed in Section IV.H. of the draft EIS/EIR.

59. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

60. The estimate of leachate generation is discussed in Responses 0001-15 and 0001-25. The collection system is continuously drained by gravity or pump and then treated according to its composition. If hazardous, it is stored and disposed of in accordance with applicable regulations. If not hazardous, it is used on roads for dust control or allowed to evaporate. For a more detailed discussion of the leachate collection and treatment system see pages 60-65 and Section IV.A.1 in the draft EIS/EIR. An alternative method of handling leachate/condensate will be to collect and store it for off-site treatment and disposal. All appropriate regulations for the handling of hazardous materials will be observed.

61. See Response 0026-4 above.

62. Under maximum operations, the landfill could accommodate up to 20,000 tons per day of refuse. The draft EIS/EIR states that a maximum of 200 daily round-trip truck trips and 6 trains would be necessary to transport solid waste to the landfill under maximum operations. This amounts to an increase of approximately two percent of truck traffic over the existing traffic of I-10. No additional truck or train trips would be required in the future. In fact, subsequent to the preparation of the draft EIS/EIR, MRC has proposed to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). See Section II.B.2 of the final EIS/EIR for a description of the reduction in truck traffic. This will reduce traffic impacts to levels even lower than the current, less than significant proposed levels. This reduction in truck trips represent a roughly one percent increase in existing traffic volumes on I-10.

63. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

64. All of the solid waste sent to Eagle Mountain landfill will be processed through a MRF or transfer station where recyclable materials will be sorted out and separated from the waste stream in accordance with AB 939. Refuse that does not comply with AB 939 will not be accepted at Eagle Mountain.

65. See Response 0026-8 above. Also, a screening level health risk assessment conducted for the proposed landfill is discussed on pages 424-427 of the draft EIS/EIR. The risk assessment has been revised to reflect the use of on-site meteorological data and updated Unit Risk Values. The revised risk assessment is included as Attachment 9, Appendix M of the final EIS/EIR. See Response 0003-40 for a summary of the revised health risk assessment.

66. Cumulative impacts associated with the proposed landfill project are addressed on pages 585-598 of the draft EIS/EIR. This discussion includes a discussion of all past, present, and reasonably anticipated future projects producing related or cumulative impacts.

67. The Solid Waste Management Plan states that "... it is illegal to dispose of solid wastes at Riverside County-operated Class III landfills which have been generated in other counties, without prior approval .... The ultimate decision to allow importation of any solid wastes whether in a private or public facility shall rest with the Board of Supervisors on a case-by-case analysis" (page IV-5).

68. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

69. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

70. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

71. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

72. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

73. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

74. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

75. The waste-to-energy concept is addressed in the draft EIS/EIR (see page 105-106) to avoid impacts associated with landfilling. The document concluded that the emissions resulting from a waste-to-energy operation at the Eagle Mountain landfill would represent a substantial and significant air quality impact.

76. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

77. The draft EIS/EIR (page 363) states that the proposed project would generate a two percent increase in traffic on I-10. This incremental increase in traffic is not considered a significant traffic impact. Furthermore, since the preparation of the draft EIS/EIR, MRC has proposed to reduce the round trip truck traffic from 200 to 100 which would further reduce traffic impacts (see Section II.B.2 of the final EIS/EIR for details). Because the proposed project is a Class III solid waste landfill which does not accept hazardous materials, trucks and trains serving the landfill would not be transporting any toxic materials.

78. As stated on page 521 of the draft EIS/EIR, the project will have no direct impact on Joshua Tree National Monument with respect to its recreation values, uses, or opportunities for camping, hiking, backpacking, photography, wilderness use, or nature study. The project area is not visible from Pinto Basin or from roads within Joshua Tree National Monument.

79. The draft EIS/EIR identifies approximately 150 acres of desert tortoise habitat (Category 3) will be permanently lost as a consequence of project operations. This habitat is not "first-rate," as very little sign of tortoise activity was found. The mitigation for this loss involves the surveying and monitoring of tortoises and ravens to minimize losses, the placement of road and rail barriers to prevent tortoise deaths, and a landfill employee education program to minimize losses. In addition, MRC will fund the purchase of approximately 375 off-site acres of tortoise habitat for preservation purposes as compensation. The lands to be purchased will be selected by the BLM. For more details see pages 446-452 of the draft document.

80. The draft EIS/EIR identifies the loss of three permanent and one temporary water sources for the Nelson's bighorn sheep. All of these water sources are artificial (i.e., leaky water tanks and remnant ponds in the bottom of abandoned mine pits). Mitigation for these water source losses will include the creation of three new permanent water sources in locations far from the mine site. In addition, Buzzard Springs will be rehabilitated and cleared of tamarisk to compensate for the loss of the temporary water source. A two-year

monitoring of the local sheep will ensure that the new water sources are located properly. Other mitigation measures for impacts to sheep are found on pages 455-456 of the draft EIS/EIR and and in Section II.C. (Biology) of the final EIS/EIR.

81. See Response 0001-25.

82. Like the majority of southern California, the project site is in an area subject to earthquakes. Several active faults have been mapped in the project vicinity, the closest being the San Andreas fault 34 miles from the site. The site would only receive low to moderate ground shaking from a large San Andreas event. California regulations require that proposed landfill sites be designed to the maximum probable earthquake acceleration, which would be about 0.1 g (gravity) for the Eagle Mountain site. However, MRC plans to design all major facilities at the site to 0.2 g, or double the state requirement. The draft EIS/EIR (page 484) identifies specific measures to be implemented in the project design to mitigate seismic impacts to below a level of significance. The project's compliance with appropriate Riverside County ordinance, specifically the Uniform Building Code, would be required.

83. This comment concurs with the conclusions of the draft EIS/EIR. See Response 0026-8 above.

84. See Response 0026-38 above.

85. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

86. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

87. The growth-inducing and socioeconomic effects of the project are identified in Section IV.H of the draft EIS/EIR. The regional recycling efforts are discussed in Response 0006-1.

88. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

89. See Response 0026-3 above. As a Class III solid waste landfill, hazardous materials will not be transported to Eagle Mountain.

90. Upon depositing the refuse at the landfill site, the railroad cars and truck would transport the empty intermodal containers back to the transfer stations. However, it is possible

that returning trains would at some times transport recyclable materials from the project site to the metropolitan area (draft EIS/EIR, page 4).

91. The possibility exists that a solid waste product will be identified as hazardous or toxic long after its use as an apparent benign product. DDT is an example. It is not within the scope of this project to predict such occurrences.

92. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

93. The cumulative air quality impacts are addressed on page 592 of the draft EIS/EIR.

94. If a conversion to energy recovery equipment is proposed in the future, the impacts of that system will require further agency approvals and environmental review (see pages 376 and 574 of the draft EIS/EIR).

95. See Response 0026-93 above.

96. As of September 19, 1991, no water remains in the bottom of the East Pit. For a discussion of the level of the groundwater beneath the proposed landfill area, see pages 121-131 of the draft EIS/EIR.

97. Impacts of night lighting are discussed on page 518-520 of the draft EIS/EIR. The significance criteria for night lighting was generated from consultation with Joshua Tree National Monument staff, who feel that lighting for lower-elevation ground uses would not be a problem. Flood lighting and high-pressure sodium fixtures would cause unnecessary spillage of light resulting in a significant impact; therefore, directed "spot" lighting is recommended.

98. No hazardous concentrations of metals or other substances have been found to be contained in the fine tailing proposed to be used for the clay liner (draft EIS/EIR, page 321). Also, see Responses 0001-10 and 0001-121. The plastic liner is not toxic.

99. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

100. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

101. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

102. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

103. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

104. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

105. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

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1. Please refer to Response 0021-7.

2. See Response 0002-7.

3. See Response 0002-7.

4. Pages 137-141 of the draft EIS/EIR discuss the availability of water in the northwestern portion of the Chuckwalla Valley. This information is based on two studies: the Mann study of 1986 and the U.S.G.S. study of 1989.

5. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

6. See Responses 0001-111 through 116.

7. See Response 0001-25 for measures to protect the area's groundwater.

8. See Response 0001-25 for measures to protect the area's groundwater.

9. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

10. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

11. This comment acknowledges the socioeconomic benefits of the proposed project, which are discussed in Section IV.H. of the draft EIS/EIR and in Response 0018-3. Since this

comment does not question the adequacy or accuracy of the draft EIS/EIR, no further response is necessary.

12. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

13. Please refer to Response 0006-1 for a discussion of state and local recycling programs and other efforts to reduce solid waste volumes.

14. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

15. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

16. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

17. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

18. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

19. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

20. This comment refers to several legitimate concerns local citizens have about the past operation of the Kaiser Steel iron ore mine. While MRC will lease the mine property from Kaiser Steel, Kaiser will not be involved in any of the permitting, construction, or operation of the proposed landfill. The allegations of illegal dumping of household garbage into the East Pit are most appropriately addressed by the Riverside County Health Department, not the draft EIS/EIR. Furthermore, the draft EIS/EIR, or the statements below, address the other issues raised in the August 30, 1989, scoping letter referenced in this comment.

    a. The proposed project prohibits the disposal of any chemical, toxic, or radioactive wastes.

    b. Air quality is addressed in Sections III. and IV.D. and in Appendix E of the draft EIS/EIR.

c. A two-year monitoring study will be conducted to assess bighorn sheep movements in the vicinity of the Eagle Mountain landfill site (p. 454 of the draft EIS/EIR).

d. The proposed improvements to Eagle Mountain Road are not expected to alter the drainage of the natural washes; rather, drainage will be improved through the use of culverts. Although the jojoba hermaphrodite specimens said to be located along Eagle Mountain Road may be scientifically rare, the species itself is not considered threatened at this time; therefore, impacts to jojoba are not considered significant.

21. While RECON prepared the Short-term Habitat Conservation Plan for Clark County, Nevada, the discussion of desert tortoise in the draft EIS/EIR is based on surveys conducted at the project site, not in Nevada, as alleged by Donna Charpied in public testimony. Pages 7-10 of the biological appendix outline the survey methodology of the report, including the days and person-hours spent conducting the surveys. The Short-term HCP is identified in the reference section of the biological appendix as lending supporting documentation for scientific assertions made in the report.

    Jean Carr has never worked on the draft EIS/EIR for Eagle Mountain. Mr. Kaldenberg worked for RECON for one year beginning in 1976.

22. The desert pupfish has not been documented to occur directly under the railroad trestle at Salt Creek. However, it does represent potential pupfish habitat. A train accident at the trestle is a very low probability event. This trestle was built to support over three times the weight of the trains that will be transporting trash to Eagle Mountain. During the operation of the Eagle Mountain Mine, no train accidents occurred at this site. The USFWS, BLM, and CDFG will be notified immediately of any accidents occurring in the vicinity of desert pupfish habitat. Should an accident occur and impact the pupfish population one-quarter mile downstream, the site could be restocked from the population in Salt Creek above the trestle at Rancho Dos Palmas. This species has been successfully transplanted to several sites in the desert region of southern California.

23. See Response 0021-12 concerning the leaf-nosed bat roost in the mine adit on the project site.

24. There is no evidence that landfill gas will accumulate in the adit extension. However, several measures exist to deal with this should it occur. First, the bat population will be monitored during landfill operations, and the adit extension periodically tested for gas. Should the presence of gas be detected in the adit, an air ventilation system currently existing in the mine shafts could be engaged to vent any accumulated gas. A second, and possibly more efficient, solution that will be recommended in the EIS/EIR will be to make sure that the landfill gas collection system that will be distributed throughout the landfill will include gas collection pipes in the immediate vicinity of the adit

extension, to siphon off any gas in the area. The concrete pipe used in the adit extension will also be sealed to inhibit or stop any infiltration of gas into the adit.

25. It is clear from past observations that bighorn sheep used the Eagle Mountain Mine site even during periods of active mining. So despite any increase in stress, many sheep will acclimate to human activity. However, it is the goal of the proposed mitigation program to shift the bulk of bighorn sheep activity away from the potentially more stressful landfill/mine area to sites in more remote sections of the Eagle Mountains. There is an abundance of sheep habitat in the Eagle Mountains, but much is not used or is under-utilized because of the lack of permanent water sources. Bighorn sheep use the current mine site primarily because of the permanent availability of water. A mitigation goal is to create new water sources in the Eagle Mountains which will cause sheep to move away from the landfill site (stress-causing human activity). These measures are explained in detail on pages 454-456 of the draft EIS/EIR.

26. The draft EIS/EIR states that the presence of the landfill has the potential to be a significant impact to the desert tortoise due to increased predation by ravens attracted to the areas by the landfill refuse (see draft EIS/EIR, pp. 446-449 and Appendix F, pp. 70-71). The document proposes to monitor both tortoise and raven populations throughout the life of the landfill project. Prior to the deposit of trash, ravens will be monitored for two years to determine baseline data. After the landfilling begins, various passive controls will be used on ravens including daily cover of trash. If the raven population is found to increase to a level that threatens tortoise populations despite the passive controls, then an active raven control program will be instituted, including a raven destruction program which would be undertaken in consultation with the BLM, USFWS, and CDFG. All permits and plans to institute this program will be in place before landfill operations begin, so that a quick response to a threat to the tortoise is possible. Raven control and monitoring measures are discussed on pages 450-451 of the draft EIS/EIR and in Section II.C. (Biology) of the final EIS/EIR.

27. The draft EIS/EIR states that at maximum buildout, the landfill project would generate approximately 163 jobs. Local qualified residents would be given a priority hiring status; however, employees may also be relocated from outside the immediate area. Current employees at the return-to-custody facility may seek employment at the landfill, which would provide additional employment opportunities at the RTCF. For a further discussion on growth-inducing impacts resulting from the proposed landfill, see pages 471-475 of the draft EIS/EIR.

28. AB 939 is a mandatory recycling program. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, which includes the removal of all recyclable materials. If refuse does not comply, it will not be taken to Eagle Mountain. If municipalities meet the 50 percent reduction in waste requirement by the year 2000,

50 percent of the waste stream must still be landfilled. The life of the landfill would not decrease the incentive to meet the requirements of AB 939. The project proposes to store recyclables until that time it is profitable to sell them, not to dump them (see page 41 of the draft EIS/EIR). Pages 105-109 of the draft EIS/EIR discuss recycling, composting, and other forms of waste source reduction in greater detail.

29. The projected life span of the project is based on the most current landfill design as depicted in the draft EIS/EIR. Landfill footprint and final elevations are detailed in the project description of the draft document. Although the lease with Kaiser Steel is for 99 years and the landfill life is 115 years, landfilling after 99 years will not be allowed unless a lease extension or other arrangement is made with Kaiser. For planning purposes, it is assumed that a lease extension will be made.

30. See Response 0027-27 above.

31. According to the draft EIS/EIR, the project would implement temporary and permanent drainage facilities to divert storm water flows around and away from the refuse fill, to collect and remove any storm water that falls on the refuse fill, to control off-site flow of waterborne debris, and to minimize erosion. The proposed landfill would be designed to meet all relevant state and federal regulations. A drainage plan for Eagle Mountain is contained in Appendix L of the final EIS/EIR. Please refer to Responses 0001-111 through 116 for additional information on the proposed drainage facilities.

32. See Response 0026-38 for a discussion of alternative waste diversion measures.

33. Section 2774 of the California Public Resources Code (Surface Mining and Reclamation Act) requires that a reclamation plan be submitted and approved for the closure of the mine. Kaiser Steel Corporation submitted such a plan in 1978, which was approved. Refilling the pit was not part of the reclamation plan. An amendment to that plan must be approved to allow a landfill to occur within the mining pit. An amendment to Reclamation Plan No. 107 was submitted November 1990 and is waiting approval as part of this project.

34. Please see Responses 0002-7 and 0002-13a and 13b.

35. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

36. Please refer to Responses 0001-111 through 116. A drainage plan for Eagle Mountain is contained in Appendix L of the final EIS/EIR. The drainage system will be designed to handle 100-year storm flows for the most critical events ranging from 1-, 3-, 6-, and 24-hour duration storms. In addition, a 500-year frequency standard will be adopted for

review of channel freeboard design. The drainage plan will divert all runoff away from the landfill as well as provide interim cover that is designed to prevent infiltration and percolation of rainwater that falls on the landfill. It is not possible for a failure of this system to result in several hundred acre-feet of water being dumped into the fill site that will result in the generation of leachate, because only rainwater that falls directly onto the open face of the landfill will be covered with either interim or final cover, which is designed to drain runoff and prevent percolation. Additionally, if an entire year's rainfall fell onto the open face of the landfill in one storm event, this would only cause the upper one foot of refuse to reach the field capacity required for leachate to be released from the refuse mass. Since a day's volume of refuse is usually 20 to 30 feet thick, there is insufficient water in the 500-year 24- or 3-hour storm events to cause the refuse to reach a point of saturation where leachate will be generated.

37. As discussed in Response 0027-36 above, even after a major storm event, vast amounts of water would not percolate into the landfill itself. Although no leachate is predicted to be generated at the Eagle Mountain landfill, the site will be provided with a leachate collection and removal system (LCRS). The LCRS will be sloped to drain at a minimum of three percent toward the centerline of the FML. The LCRS blanket drain will be placed on the FML protective geotextile filter fabric. The LCRS geotextile filter fabric will be placed over the upper surface of the LCRS blanket drain to protect the blanket drain from infiltration of fines from the protective soil cover above the LCRS blanket drain. The protective soil cover will maintain separation between the refuse and the LCRS liner system. The protective soil cover is intended to mitigate potential damage to the underlying drainage system and liner during construction and during initial lifts of refuse filling.

38. During development of more detailed design specifications for project construction, an engineering decision was made to design the leachate collection system using a blanket drainage system rather than a series of interconnecting leachate collection pipes operating under a gravity system in the higher elevations and a pump system in the lower elevations as discussed in Section IV.F. of the draft EIS/EIR. More details of the leachate collection system can be found in Response 0027-37 above.

39. The drainage system will be subject to approval by the relevant state and federal regulatory agencies as well as the County Flood Control District.

40. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

41a. The RWQCB's permitting process will require the implementation of the applicable state and federal regulations which would assure that the liner design ensures the integrity of the liner during seismic events and the static loading of the refuse. The site is 34 miles from the nearest active fault, the San Andreas, and as such will only receive low to moderate ground shaking. As per the active fault evaluation prepared by geologist Dr. Richard Proctor titled "Evaluation of Active Faulting at Eagle Mountain," the maximum probable earthquake acceleration at the Eagle Mountain site is 0.1 g (gravity). However, the landfill will be designed to withstand the maximum probable earthquake without damage to the foundation, fill slopes, or structures which control leachate, gas collection, or surface drainage. That is, all structures will be designed to withstand 0.2 g, double the maximum probable earthquake.

41b. The groundwater basin is distantly connected to the aquifer. However, due to the proposed mitigation measures working in conjunction with each other, the area's groundwater resources would be protected from any degradation. See Responses 0001-8 and 0001-25. A detailed description of the composite liner and the leachate collection and removal system can be found in Response 0002-4. A description of the proposed groundwater monitoring program is provided in Response 0002-5.

42. Please refer to Response 0017-10 for a discussion of traffic impacts associated with the proposed project.

43. The draft EIS/EIR identifies measures to control potential fire hazards and associated smoke (see page 340-344). Measures to control vectors include the application of a daily earthen cover, barriers, and explosive noises (see page 345-347). Please refer to Response 0001-97 for a detailed discussion of odor impacts.

44. See Response 0006-1. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program to ensure the adequate removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain.

45. Please refer to Response 0017-10 for a discussion of traffic impacts associated with the proposed project.

46. The Air Quality section of the draft EIS/EIR discusses both the South Coast Air Basin and the Southeast Desert Air Basin air quality standards because aspects of the project occur in both air basins. The draft document does address the project's air impact under SCAB rules. See pages 368-418.

47. The draft EIS/EIR (page 363) states that the proposed project would generate two percent increase in traffic on I-10. This incremental increase in traffic is not considered a significant traffic impact. Furthermore, since the preparation of the draft EIS/EIR, MRC has proposed to reduce the round- trip truck traffic from 200 to 100, which would further

reduce traffic impacts (see Section II.B.2 of the final EIS/EIR). The draft EIS/EIR (page 351) states that the project itself and the operation of off-site transfer stations to serve the project would not be expected to increase the frequency of accidents involving solid waste transport, when considered in terms of accidents per ton-mile of transport. Emergency response plans are already in place at the local government level, as part of federal and statewide programs (see Response 0026-3). As part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers and trash pickup as necessary.

48. Yes, Eagle Mountain Road will be doubled in width from 20 feet to 40 feet to accommodate the truck traffic as explained on page 25 of the draft EIS/EIR. The traffic impacts along Eagle Mountain Road are addressed on pages 363 to 365 of the draft EIS/EIR, which concludes that no significant impacts due to truck traffic on surface streets are anticipated. Additionally, subsequent to preparation of the draft EIS/EIR, MRC has proposed to reduce truck traffic to the project site from 200 to 100 round-trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

49. Page 157 of the draft EIS/EIR discusses the existing daily traffic on Eagle Mountain Road, pointing out that it primarily serves traffic related to the MWD pumping station. The document fails to mention that approximately 15 residences are located on the MWD property, accounting for the 65 daily vehicle trips shown on Figure 50. Figure 78 shows the 1995 future traffic volumes on Eagle Mountain Road to be 485 vehicles (200 trucks each way and the 1990 daily trips factored upward to reflect growth at the MWD pumping station). The traffic report determined that all traffic movements would continue to operate at LOS A (excellent).

50. The draft EIS/EIR (page 365) concludes that regardless of the configuration of the intersection at Eagle Mountain Road and Kaiser Road, LOS A operating conditions would result. This is the optimum LOS obtainable.

51. The proposed landfill operations will not involve the transport of hazardous materials. In the event of a rail accident, the clean-up procedures for nonhazardous materials are described in Response 0026-3.

52. Please see Responses 0021-7 and 0026-3.

53. Operation of the landfill and associated equipment will be in accordance with the terms and conditions of Title 14, California Code of Regulations. In particular, those sections which require actions to prevent the harboring of flies, birds, and vectors will be observed. See Responses 0026-9 and 10 for a discussion of measures to control dust and windblown

debris. Also, measures to control vectors include the application of a daily earthen cover, barriers, and explosive noises (see page 345-347 of the draft EIS/EIR).

54. As stated on page 50 of the draft EIS/EIR, truck traffic to the Phase I container handling yard would use Interstate 10 and the existing Eagle Mountain Road. From Eagle Mountain Road, approximately six miles north of I-10, the new Eagle Mountain Road extension would provide access directly to the Phase II container handling yard. See Response 0027-49. Currently, approximately 6,000 trucks use I-10 per day. During high winds, these trucks are stopped at the bottom of the Indio grade. The additional trucks serving the landfill will lay over there also. If an overflow of trucks arrives at the landfill simultaneously, a line will be formed at the container handling yard and the intermodal containers will be removed from the trucks in the order they arrived. The landfill would continue to operate under normal conditions.

55. See Response 0027-57 below for a detailed discussion of project impacts to the residents near the pumping station, including noise. Phase I operations would involve one round-trip train trip per day to the Phase I container handling yard. There is not a significant noise impact on the return-to-custody facility, which is much closer to the railroad tracks than the school. When the Phase II operations commence, up to five trains serving the Phase II container handling yard will be utilizing the new rail alignment located approximately 1.5 miles from the school.

56. Although the applicant is not proposing nighttime landfill operations except for the unloading facilities, such lighting and security lighting from the landfill could present a potential visual impact to the surrounding area. The draft EIS/EIR (page 518-519) identifies project design features to reduce potential night lighting to below a level of significance, including limitation on night activities, the type and direction of lighting, and truck traffic routing.

57. This comment is correct. The Metropolitan Water District operates a pumping plant and ancillary facilities located 1.5 miles south of the southernmost project boundary and 4 miles south of the landfill footprint at its closest point. There are approximately 15 single-family residences in the vicinity of the pumping plant, housing approximately 60 MWD employees and their families. Access is provided by the existing Eagle Mountain Road to Interstate 10, and by the MWD maintenance road from the pump station north to Kaiser Road. The residences are located approximately 3,500 feet west of the existing Eagle Mountain rail line and the proposed Eagle Mountain Road Extension. The following is a discussion of issues which may potentially impact the residents at the MWD plant.

    a. Traffic. All truck traffic hauling refuse to the site will be required to use the Eagle Mountain Road Extension via Eagle Mountain Road. Up to 12 trains of refuse would cross Eagle Mountain Road and the MWD access road per day (6 trains to the landfill and 6 return trains).

Eagle Mountain Road runs from south of I-10 north to the MWD pumping station, located approximately 7 miles north of the interstate. The existing roadway is a two-lane facility with a 20-foot paved width. Existing traffic volumes on Eagle Mountain Road and its freeway interchange with I-10 are very low, since the road primarily serves only traffic associated with the pumping station and residents there. As shown on Figure 7, current average daily traffic volume on Eagle Mountain Road between the I-10 freeway ramp and Ragsdale Road (a short two-lane facility which connects Eagle Mountain Road with Kaiser Road to the east) is 110 vehicles. The existing daily traffic volume on Eagle Mountain Road from Ragsdale Road to the MWD pump station is 65 vehicles. All intersections currently operate at a Level of Service (LOS) A, meaning minimal or no delays and free flow for all traffic movements. Also, see Response 0027-49 above.

By 1995 the daily traffic volume on Eagle Mountain Road between the I-10 freeway ramp and Ragsdale Road would be 135 vehicles. Between Ragsdale Road and the MWD pump station, the 1995 ADT would be 85 vehicles. The traffic appendix of the draft EIS/EIR (Appendix D:33) explains that these estimates of future traffic volumes are based on applying generalized growth rates from the Southern California Association of Governments Regional Transportation Plan to the current traffic volumes. With these projected traffic volumes, LOS A conditions are projected for all turning movements.

The project proposes to extend and widen Eagle Mountain Road so that it is capable of accommodating the increased truck traffic associated with the transport of solid waste to the landfill site. The extension would begin at the point where the existing public road now ends just south of the MWD pump station. The extended road would follow parallel to the existing railroad tracks, and to the new rail spur proposed to lead to the Phase II container handling yard.

All project-related truck traffic would be required to use Eagle Mountain Road and its extension. The project would be limited to a maximum of 100 one-way truck shipments (200 round trips) per day. With implementation of the proposed project, future (1995) traffic volumes on Eagle Mountain Road are estimated at 335 vehicles in the sector between I-10 and Ragsdale Road, 285 vehicles on the sector between Ragsdale Road and the MWD pump station, and 200 vehicles on the sector north of the station (the sector to be extended).

The extended and improved Eagle Mountain Road would be constructed to match County standards for a mountain arterial (40-foot-wide pavement/110-foot right-of-way). As such, the roadway would have a nominal capacity of 18,000 ADTs (Studor, Riverside County Transportation Department, 12/18/91). Since the traffic volumes expected to result from project implementation would be well below this capacity, no significant degradation in operating conditions is anticipated as a result of project-related truck traffic on Eagle Mountain Road. All traffic movements would continue to occur at LOS A.

The railroad line and its proposed spur into the Phase II container yard will include four at-grade crossings in the vicinity: (1) the existing at- grade crossing on Eagle Mountain Road at Victory Pass, two miles south of the MWD pump station, (2) a crossing where the Eagle Mountain Road extension would begin at Eagle Mountain Road, (3) the existing crossing where the railroad crosses the MWD access road about 1.5 miles north of the pump station, and (4) a new crossing where the new rail spur will cross Kaiser Road. The busiest of these at-grade crossings (number 4) was analyzed in the traffic appendix (Appendix D:45-47), and was determined not to represent a significant hazard. The project would, however, install an automated crossing gate at this location.

Of the remaining three crossings, (1) and (3) would affect the residents at the MWD pump station in the same manner as the previous operations of the Kaiser ore trains. Minor delays at one access point or the other would occur as trains pass. A review of 28 years of operations records revealed no collisions with motor vehicles at either of these crossings. In the highly unlikely event of a rail accident that would block either Eagle Mountain Road or the MWD access road to the north, the other access route would remain open since a distance of about four miles separates the two. Thus, the resumption of rail operations is not expected to have a significant impact on vehicle traffic to and from the MWD pump station and its associated residences.

b. Air Quality. Potential air quality impacts to the MWD site would be generated by three activities associated with the proposed project: (1) rail and (2) truck transport of solid waste to the site, and (3) on-site operations at the landfill site itself. The revised air quality modeling results presented in Appendix M (Attachment 5, Table 36, and Attachment 8) indicate that for the worst-case receptor point in the project vicinity, all short-term and long-term standards for all air pollutants would be met. The worst-case receptor points for the 24-hour and annual averages are located along the easterly project boundary, approximately four miles north of the MWD pump station. Effects on ambient air quality at the pump station itself, and at the residences associated with the pump station, would be substantially less than at the worst-case receptor point. Local air quality impacts at the pump station would, therefore, not be significant.

c. Noise. Potential noise impacts to the MWD site would be generated by three activities associated with the proposed project: (1) rail and (2) truck transport of solid waste to the site, and (3) on-site operations at the landfill site itself. Riverside County does not have a noise ordinance that would apply to this project. However, the state Department of Health has established guidelines for assessing the compatibility of community noise environments and land uses in terms of CNEL (Community Noise Equivalent Level). These guidelines are summarized in Figure 76 of the draft EIS/EIR.

CNEL represents a time-weighted 24-hour average noise level based on the A-weighted decibel (dBA). "A" weighting equates noise to the frequency response of the human ear. Time weighting involves the penalization of noise (or the determination that a noise is perceived to be louder) during certain periods during which people's sensitivity to noise is increased. The CNEL scale penalizes noises during the evening period (7 to 10 P.M.) by 5 dBA, and by 10 dBA during the nighttime (10 P.M. to 7 A.M.). The highest threshold noise levels considered normally acceptable for single- and multi-family residences are 60 dBA CNEL and 65 dBA CNEL, respectively. Noise measurements conducted during December 1989 measured the equivalent noise levels (L_{eq}) and the maximum noise levels (L_{max}).

1) Train Noise. The residences at the MWD pump station are 3,500 feet from the area of track where they have a line of sight uninterrupted by hills. Table 17 of the draft EIS/EIR indicates that the existing one-hour L_{eq} values in this vicinity were measured at 46 dBA. As indicated by the data shown in Table 19 of the draft EIS/EIR, 12 trains per day at this distance would produce noise levels of about 40 CNEL, which is consistent with rural areas. Assuming that a 10-minute L_{eq} is 79 dBA at 50 feet, at 3,500 feet the 10-minute L_{eq} would be 50 dBA. Twelve events per day of 50 dBA L_{eq} occurring for 10 minutes each in an area where the existing ambient is 46 dBA L_{eq} would be audible but would not constitute a noise level significantly intrusive on people's activities.

2) Truck Noise. Trucks transporting solid waste would only be allowed to use Eagle Mountain Road and its extension. Where the houses near the pump station have a line of sight uninterrupted by topography, they are 3,500 feet from the roadway. A heavy truck traveling at 35 mph along Eagle Mountain Road would produce a noise level of 80 dBA at 50 feet. At 3,500 feet, using an attenuation rate of 5 dBA for every doubling of distance plus 3 dBA for atmospheric absorption, the exterior noise level produced by the truck would be 46 dBA.

Existing daytime average hourly noise levels in the vicinity of the area occupied by the MWD facility were measured at 46 dBA L_{eq}. Interior noise levels would be less due to attenuation by the buildings. It is not likely that the noise level of 46 dBA produced by a truck pass-by would significantly impact the residences at the MWD pumping station either during the daytime or during the nighttime.

3) Landfill Noise. The landfill operations would be limited to the daytime hours and only the container handling yard would operate on a 24-hour basis. During the nighttime, the yard would only load or unload containers and perform maintenance activities.

Table 49 of the draft EIS/EIR shows the noise levels projected to be produced by on-site equipment. As shown in the table, the loudest equipment would generate a combined noise level of 106 dBA. Maximum noise levels for each piece of equipment were used to obtain the combined 106 dBA level, which would be a worst-case scenario.

The MWD pump station and residential land uses are located approximately 3.6 miles south of the landfill site. Ambient noise levels in this vicinity were measured to be approximately 46 dBA. Assuming that the landfill is a point source, the attenuation rate would be 6 dBA for every doubling of distance plus 1 dBA for every thousand feet due to atmospheric absorption (Bolt, Beranek, and Newman Inc. 1973). Therefore, at the MWD pump station and residences, the noise level would be 36 dBA from the landfill. This is a conservative estimate because of the assumption of a worst-case noise level and the fact that intervening topography was not considered. It should be noted that many of the landfill operations would occur inside the pit, which would provide shielding, and the equipment would be dispersed throughout the site, further reducing the estimated maximum noise level. The estimated worst-case 36 dBA landfill noise level would not be a significant impact.

d. Utilities and Services. Secondary effects of the project include an increase in the demand for utility and other services from the added population of workers and their families. Relative to the existing residents at the MWD pump station, no significant impacts relating to an increased demand for electricity, natural gas, and telephone service are anticipated. Within the Eagle Mountain community, neither the elementary nor the middle schools are being used. Approximately 93 students enrolled in grades K-8 use the high school building, and the 30 high school students from the area are bused to Blythe. The anticipated increase in the school-aged population would not substantially alter the educational services for the community.

Improvements to the fire station, and the water supply system for fire protection are expected with the soon-to-be expanded RTCF. Additionally, since the larger population attracted to the area by the new job opportunities at the landfill would be served by the fire fighting staff at the RTCF, the proposed project would contribute to the funding of the fire improvements necessary to provide the required fire flows in the housing area and the landfill site. Emergency medical services would be provided by fire fighting personnel assigned to the fire station; critical emergency service in the area (by helicopter) is now provided from Indio or Riverside. The Riverside County Sheriff's Office does not anticipate any significant impacts in the department's ability to continue providing service to Eagle Mountain. Thus, the provision of emergency services in the vicinity of the MWD pump station would not be degraded by the proposed project.

The MWD resident's potable water needs are provided for by the MWD; water is taken directly from the Colorado River Aqueduct, treated on-site at the pump station and distributed to the station residents (Ray Hurd, MWD, 12/23/91). No significant adverse potable water impacts would be expected.

58. The Riverside County Planning Department has on record a letter received from James O. Wallace, Agricultural Commissioner and Director of Weights & Measures, dated April 10, 1990. It states "that the provisions stipulated for the landfill operation at Eagle Mountain would not contribute to the artificial spread of a quarantinable pest [e.g., Mediterranean fruit fly (Medfly)]." A variety of factors combine to make the probability of aerial spraying of malathion in the Desert Center area for the purpose of controlling an extensive Medfly infestation quite low:

- The insects are not likely to survive in the conditions of compaction, transport, and burying to which the solid waste would be subject.

- The availability of host fruit to support the insect is quite low, relative to urban areas, in the Desert Center area. Grapes, which are grown in the area, are not a good host fruit for this insect.

- Control measures other than aerial spraying are available. State law does require the Director of the Department of Food and Agriculture to take steps to control and eradicate infestations of the Medfly but does not prescribe the control method to be used. Release of sterile individuals, spot spraying at ground level, and other techniques have been successfully applied to control infestations in Riverside County.

In the unlikely event that malathion would be used in an eradication program, risks posed to public health and the environment would be quite low. Any application of pesticides in an eradication program is controlled by existing regulations to avoid or minimize adverse effects. For example, spraying on or near open bodies of water such as the Colorado River Aqueduct is prohibited. One reason that malathion is a widespread pesticide is that it does biodegrade in the environment within a matter of days to weeks. In summary, all of these factors operate together to make the potential for the risks implied in the comment very small (California Department of Food and Agriculture, Pesticide Registration Branch, Don Henry, pers. comm., April 29, 1992).

59. Surface drainage is directed across the aqueduct, not leachate. At the locations where the surface water will be allowed to cross the aqueduct, the aqueduct is covered. Waters to be released in existing channels that presently cross the aqueduct are storm waters that have been unaffected by the landfill operations. See the drainage section (IV.F.) of the draft EIS/EIR for more details. Also, the updated drainage report is contained in Appendix L of the final EIS/EIR.

60. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

61. A discussion of at-grade rail crossings can be found on pages 358-362 of the draft EIS/EIR. The draft EIS/EIR concludes that the effect of the project on safety at rail crossings with surface streets is not considered a significant impact. The draft EIS/EIR states that due to the presence of school children, MRC will install flashing lights at the railroad crossing proposed along Kaiser Road. This measure will make it one of the lowest-hazard at-grade crossings analyzed. Also, since the preparation of the draft EIS/EIR, MRC has proposed to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This measure would further reduce traffic impacts. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

62. The monitoring of emissions standards by Southern Pacific will not be the responsibility of MRC. It will be the continued responsibility of the South Coast Air Quality Management District to investigate any complaints or violations pertaining to visible exhaust with respect to Southern Pacific operations as prescribed by Rule 401 of the district.

63. Subsequent to the issuance of the draft EIS/EIR, a revised Chapter 15 was issued by the State of California. One of the new provisions of Chapter 15 states: "Waste discharge requirements shall contain a provision which requires the discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases for the waste management unit." This provision requires the discharger to post a bond to provide for cleanup of any foreseeable release. The amount of the bond is established by the Regional Water Quality Control Board after evaluation of the nature of the refuse, the site characteristics, protection measures, and other factors.

64. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

65. The County of Riverside General Plan does not require a minimum distance between Class III nonhazardous landfills and school sites. The distance requirement referenced in this comment applies to hazardous waste disposal sites; however, this would not apply to the proposed Class III nonhazardous landfill (County of Riverside 1986:365).

66. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

67. See Response 0001-25.

68. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. Air impacts are addressed in Section IV.D. of the draft EIS/EIR.

69. Project implementation is expected to result in additional consumption of approximately 20,000 gallons of diesel fuel per day. The fuel consumption associated with the proposed action is primarily due to the proposed rail operations to the landfill site. However, the use of rail transport is more fuel efficient that using trucks to haul the waste approximately 75 miles to the landfill site. The estimated 20,000 gallons of additional diesel fuel consumption per day is equivalent to approximately 650 megawatt-hours of energy consumption each day. The LFG recovery and utilization system discussed in the draft EIS/EIR (pages 40, 41, 574-584) is not expected to produce an equivalent amount of energy until peak power production reaches 32 MW. Depending on LFG generation rates and other factors, the landfill will have been operating for 12 to 27 years before this power output is achieved (sometime between the years 2004 and 2017).

70. At maximum operations, the project originally proposed 200 round-trip truck trips per day to deliver refuse to the site. An additional 250 round-trip vehicle trips are anticipated which would include employee travel, delivery vehicles, service vehicles, and other traffic to and from the site. Only a small portion of these vehicles would be trucks. Overall freeway traffic would be increased roughly five percent, while truck traffic would represent a two percent increase in the overall daily traffic volume on I-10.

    Subsequent to the preparation of the draft EIS/EIR, MRC proposed to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This would represent a roughly one percent increase in the overall daily traffic volume on I-10, which is considered an insignificant increase. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

71. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

72. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

73. See Response 0026-4.

74. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

75. Please see Responses 0001-36 and 0002-13.

76. By order of the Riverside County Environmental Health Division, Kaiser Steel has repaired the leaking water tanks for the town of Eagle Mountain. A water source for bighorn sheep has been placed at one of the tank sites (with the approval of the California Department of Fish and Game). If the project is approved, the loss of a permanent water source for Nelson's bighorn sheep is mitigated by replacement of a permanent water source in an area away from the landfill.

77. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

78. Please refer to Response 0006-1 for a discussion of regional recycling efforts. In addition to household and neighborhood recycling efforts, recycling activities are required at the MRFs and transfer stations. Waste which has not been processed for the removal of recyclables will not be sent to Eagle Mountain for landfilling.

79. As outlined in Section IV.H. of the draft EIS/EIR, the increase in population, employment, and income resulting from the proposed project would be considered an economic benefit to the Desert Center communities (see Response 0018-13). Furthermore, the draft EIS/EIR states that the increased population could also have a positive influence on real estate and property values in the surrounding area.

80. The memorandum of understanding between MRC and the County of Riverside is discussed in the Socioeconomics section, page 476 of the draft EIS/EIR. One stipulation of the MOU requires that MRC pay the County of Riverside $444,000 toward the cost and operation of CSA 51 during the project permitting phase provided that certain other requirements established in the MOU are met.

81. Water quality data were obtained from the California Department of Water Resources, the Lower Colorado River RWQCB, the Riverside County Department of Health, the

U.S. Geological Survey, and Kaiser Steel Resources. In addition, water samples were taken from seven wells in the northwestern Chuckwalla Valley. These data indicate that the groundwater quality in most of the northwestern Chuckwalla Valley is not suitable for drinking without treatment because its fluoride concentrations exceed the national primary drinking water standards. The town of Eagle Mountain uses untreated groundwater for industrial and domestic purposes, but due to the high fluoride content, all drinking water is provided by tanker truck or in bottles. Lake Tamarisk has a plant which treats the water for fluoride removal.

82. The Solid Waste Management Plan states that "... it is illegal to dispose of solid wastes at Riverside County-operated Class III landfills which have been generated in other counties, without prior approval.... The ultimate decision to allow importation of any solid wastes whether in a private or public facility shall rest with the Board of Supervisors on a case-by-case analysis (page IV-5)."

83. See Response 0026-28.

84. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a layer of low-permeability soil and a 60-mil high density polyethylene (HDPE) flexible membrane will be placed over the entire area underlying refuse. A description of the modified containment system is contained in Section II.B.1 of the final EIS/EIR. See Responses 0001-10 and 11.

85. "State-of-the-art" for municipal solid waste landfills is a single composite liner formed from a synthetic flexible membrane liner and a low-permeability soil layer having a permeability of 1×10^{-7} cm/sec or less. Double composite liners are prescribed for the land disposal of *hazardous waste,* which is not required for the proposed Class III landfill. Please see Response 0026-33.

    A detailed description of the proposed liner is provided in Response 0002-4.

86. See Response 0026-29.

87. See Response 0026-29.

88. See Response 0001-18, 28, and 29. Contrary to this comment, fractures in the bedrock will facilitate the groundwater monitoring because the detection wells will be placed in fracture zones which are most likely to be impacted by a release from the waste management unit.

89. A Class III nonhazardous municipal solid waste landfill is proposed at Eagle Mountain. As stated on page 48 of the draft EIS/EIR, state laws and regulations define nonhazardous

solid waste as garbage, trash, refuse, paper, rubbish, industrial waste, ashes, appliances, food waste, and other materials provided that such wastes do not contain wastes which must be managed as hazardous waste or wastes with soluble pollutants in concentrations that exceed water quality objectives. In the event that radioactive materials are detected, such materials would be removed in accordance with procedures specified in the project's solid waste facilities permit.

90. Response 0009-1 addresses air quality impact to both the South Coast Air Basin and the Southeast Desert Air Basin caused by transportation of solid waste materials to the Eagle Mountain landfill. The unit trains serving the landfill would consist of one or more locomotives carrying up to 14 railcars, not 100 cars as this comment suggests. Each train would be less than 4,000 feet long and carry approximately 3,500 tons of refuse. This length is somewhat shorter than most main line trains and approximately the same length as the trains previously used by Kaiser. The trainloads of solid waste material would be considerably lighter than those which transported iron ore during the former mining operations.

91. At the present time, Caltrans has no plans to widen Interstate 10 from Indio to Desert Center.

92. Please refer to Response 0027-81.

93. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0028 Letter from California Public Utilities Commission, August 19, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0029 Letter from California Department of Conservation, August 13, 1991

1. The 1978 reclamation plan (Number 107) was approved for the closure of the Kaiser Eagle Mountain iron ore mine. It was amended in late 1990 to reflect the use of the property as a landfill. The amended reclamation plan must be approved by the Riverside County Planning Commission prior to implementation of the project. The draft EIS/EIR for the Eagle Mountain Landfill project covers this discretionary action (page 5).

DOCUMENT 0030 Letter from California Department of Transportation, August 21, 1991

1. Scheduling of refuse unit trains will be coordinated with Southern Pacific Railroad to prevent any conflict between ongoing or future rail operations and trains being utilized for the landfill project (draft EIS/EIR, page 357).

2. See Response 0015-2.

3. The refuse transported by rail or truck would be contained in closed intermodal containers, 40 × 8 × 8 feet in size. Standard intermodal containers are not sealed in the sense that they are watertight. Dripping wet refuse will not be placed in containers. The rear closure is a tightly fitting latched door that will prevent the escape of refuse. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged.

DOCUMENT 0031 Letter from Clarence Suchil, August 29, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0032 Letter from Citizens for Chuckwalla Valley, no date

1. This announcement from the Citizens for the Chuckwalla Valley expressed their concern regarding the proposed landfill and noticed the two public hearings. It does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0033 Letter from City of Palm Desert, August 27, 1991

1. All of the solid waste will be processed through an MRF prior to being hauled to Eagle Mountain, with the exception of refuse coming from the local area including Desert Center, Lake Tamarisk, and Eagle Mountain. In this case, the waste would be sorted and separated at the waste screening station/inspection facility located in the Phase II container handling area. See pages 39-40 for details on this program.

2. See Response 0015-2.

3. A discussion of waste diversion programs, including green waste and composting, to reduce the waste entering landfills is discussed on pages 105-109 of the draft EIS/EIR. In compliance with AB 939, green waste will likely be removed from the waste stream for composting at the transfer stations and MRFs. These programs, however, would not

eliminate the need for new or expanded landfills in southern California; therefore, waste diversion programs were considered but eliminated from detailed analysis.

4. The proposed project includes accepting truck-transported waste from local areas in Riverside and San Bernardino counties, especially during Phase I of the project. The Reduced Landfill Operations alternative halves the truck transported waste, retaining minimal truck transport to serve potential future demand in Riverside County which cannot be served economically by rail transportation.

5. The mitigation measures cited on pages 382-386 of the draft EIS/EIR would serve to minimize the PM10 impact during construction and operation of the landfill. For an analysis of weather conditions at the landfill site which may affect the Coachella Valley, see Response 0021-1.

6. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

7. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

8. The Eagle Mountain landfill project will comply with all mitigation measures set forth by the South Coast Air Quality Management District. However, electrification of the railway is not considered feasible for the Eagle Mountain rail line at this time because of the steep grades and several major turns in the rail line (page 386 of the draft EIS/EIR). Also, the costs and physical disturbance necessary for the installation of the third rail or catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures. The electrification of the Eagle Mountain rail line will be evaluated when sufficient landfill gas is generated to provide the required electrical energy.

9. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0034 Letter from California Department of Fish and Game, August 26, 1991

1. The Habitat Management Areas referenced in the draft EIS/EIR were not included for the purpose of comparison with the proposed landfill project, but to give a regional overview of resource agency planning and administration near the project. If a habitat management plan for the Eagle Mountains becomes available before the draft EIS/EIR becomes finalized, then it will be incorporated into the document.

2. Although the time of year of the botanical survey precluded finding certain annual plant species, all sensitive species known or with potential to occur on the property are perennials and were observable during the survey period. Directed searches were made for these sensitive species. While additional botanical survey would lengthen the plant species list, it would not significantly alter the project impact analysis (see Appendix F, p. 7, par. 2; p. 9, par. 4).

3. As with the botanical survey, the faunal survey did not assess the landfill site during all seasons. This resulted in some species, either certain migrants or those that are only active during certain seasons, going unobserved during the survey. While a number of species may not be readily observable, signs of their activity can be found and mapped. An emphasis was also placed on delineating any sensitive habitats that might be present. For certain species—bats, for instance—seasonal surveys were performed. Thus, the surveys for wildlife species were adequate and that the lengthening of the species list would not significantly change the impact analysis for the project.

4. The proposed mitigation for losses of Alverson's foxtail cactus includes establishing transplant trials for 10-15 percent of the population prior to undertaking transplantation of the entire impacted population. The test site will be carefully monitored. Only after the test has been successful for a minimum of two years will the remaining cactus be transplanted. Also, the final mitigation areas will be monitored to measure survivorship of the cacti and determine the degree of success of the transplant program. The test transplant sites are located within the open space subarea of the Specific Plan (Subarea 6) as illustrated on Figure 20 of the Biological Assessment (Appendix N of the final EIS/EIR). Although the transplant program is not without some risk, it is considered adequate by BLM since a large percentage of the existing locations of Alverson's foxtail cactus occur on lands already protected. A final report will summarize the results of the transplant program and be submitted to BLM, CDFG, and USFWS. This mitigation program is proposed by BLM, the lead agency for the draft EIS/EIR.

5. The California barrel cactus was recently down-listed to a federal Category C3c plant. This means that distributional information on the species has become available and it was determined that the species is too widespread and is not threatened at this time. Therefore, impacts to this species are not considered significant. Although some loss of individuals of this species will occur under the proposed project, large portions of the California barrel cactus population at the landfill site will be included in the natural open space areas. Discussion of this species is contained within the draft EIS/EIR (see pp. 239 and 464; Appendix F, pp. 36 and 66).

6. The draft EIS/EIR concludes that impacts will occur to only a very few plants of Orocopia sage within the Eagle Mountain rail line right-of-way. Avoidance of all impacts will be attempted by clearly marking, in the field, the areas supporting Orocopia sage and by

diverting maintenance activities around these marked areas. Any impacts that absolutely could not be avoided would be minimal and are not considered significant. This species is a candidate for listing, but is not listed. A "no net loss" policy, regulation, or law does not exist for Orocopia sage.

7. This response reflects the updated information regarding the population of bighorn sheep occurring in Joshua Tree National Monument to an estimated 150 (instead of 100 as stated in the draft EIS/EIR, Appendix F, page 51).

8. A 1990 aerial survey of the Eagle Mountains was conducted and estimated 50 animals, of which 19 were counted in the immediate vicinity of the Eagle Mountain Mine (see Appendix F, p. 54, par. 1). Revised population estimates for bighorn sheep in the various mountain ranges surrounding the Eagle Mountains are as follows: Eagle Mountains (50), Orocopia Mountains (80), Chuckwalla Mountains (25), and Chocolate Mountains (160) (Weaver 1989).

9. As this comment points out, supporting documentation should be provided for the bighorn sheep intermountain movement. This response reflects that the draft EIS/EIR (page 236) and Appendix F, p. 52, par. 3 should read ". . . corridors have been documented for sheep in the California desert area by the BLM and the CDFG (Bleich et al. 1990)." Also, the following citation was omitted from the draft EIS/EIR: "Bleich, V. C., J. D. Wehausen, and S. A. Holl. 1990. Desert-Dwelling Mountain Sheep: Conservation Implications of a Naturally Fragmented Distribution. *Conservation Biology* 4(4):383-390."

10. As recommended in this comment, this response reflects the deletion of the statement that bighorn sheep bedding areas may be a limiting factor for sheep populations.

11. It is the opinion of the bighorn sheep biologists at the BLM that there is more potential bighorn sheep habitat in the Eagle Mountains than is currently utilized. This is because at Eagle Mountain, permanent water is the limiting factor in bighorn distribution, not vegetation. The 894 acres of bighorn habitat that would be lost to the proposed landfill represents habitat that is closest to the currently heavily disturbed Eagle Mountain Mine. This habitat is occupied primarily because it is closest to water sources on the disturbed mine site. Whether this habitat, given its proximity to past and present human disturbance, should be considered "prime habitat" is debatable. The proposed mitigation plan would redistribute bighorn activity away from the mine site into unoccupied habitat where impacts from human disturbance would be lessened. This would be accomplished through the establishment of new water sources. Given the amount of unoccupied bighorn habitat in the Eagle Mountains, the loss of 894 acres adjacent to the mine site would not be significant when combined with mitigation plan implementation.

12. As requested in this comment, the discussion on the effects of stress to bighorn sheep (Appendix F, page 71 of the draft EIS/EIR) has been expanded to read as follows:

> Indirect impacts to bighorn sheep may occur if the landfill operation causes sheep to alter their use patterns in the habitat surrounding the landfill. Bighorn sheep are known to respond to the presence of humans and vehicles with an increased heart rate due to stress. However, unless there is a direct threat to the sheep, heart rate usually quickly returns to normal, indicating habituation (MacArthur et al. 1979). Sheep accustomed to the presence of humans have allowed humans to approach to within 50 meters before an increase in heart rate occurs (MacArthur et al. 1979). How much habituation occurs is not known. Whether prolonged sheep-human interaction significantly increases the stress levels in bighorn to the point where there is a decline in reproductive success or an increase in susceptibility to disease is not known. There are examples in Nevada of bighorn sheep populations that have remained fairly constant for the past 50 years despite a significant increase in adjacent human recreational activity (McQuivey 1978). The most serious human impacts are those that remove habitat or block sheep access to needed resources, such as water holes. The bighorn sheep population in the Eagle Mountains appeared to habituate to past mining activities, as they were regularly observed near the mine and adjacent haul roads while the mine was active (Anderson, pers. comm., 1989). It is likely that they will also habituate to landfill operations.

13. The project proponent (MRC) would prefer to contract with the CDFG to carry out the entire bighorn sheep telemetry/monitoring study, with input to program design from BLM, RECON, and the U.S. Park Service. MRC proposes to pay for the study and the installation and maintenance of the new water sources. The location and design of the new water sources will be decided upon by the CDFG and BLM, with input from MRC and RECON. The mitigation for the loss of one temporary water and three permanent sources is the creation of three new permanent water sources and the rehabilitation, for bighorn use, of Buzzard Springs. Any costs necessary to translocate sheep will be borne by MRC.

14. The new bighorn sheep water sources will be maintained throughout the 115-year life of the landfill project and, replaced by MRC, if necessary. The new water sources will be monitored to insure that they are functional year-round. If proper function entails transporting water to the site, MRC will do so.

15. The draft EIS/EIR states that domestic sheep should not be allowed on the proposed Eagle Mountain landfill site (p. 456, par. 1). A separate environmental document will be required for impact assessment on the Eagle Mountain townsite. This will address and develop any necessary restrictions (e.g., no domestic sheep) on the landfill employees who will reside in the town.

16. As discussed on page 454 (second paragraph) of the draft EIS/EIR, no significant impacts to bighorn sheep are anticipated from reintroduction of rail service along the Eagle Mountain rail line. No documented bighorn sheep dispersal route crosses the rail line. At only one location were tracks found along the rail line during the biological survey, and it was the opinion of the local BLM biologist that these were most likely mule deer, not bighorn, tracks. Bighorn are tolerant of some human disturbance, as evidenced by their continued use of the Eagle Mountain Mine while it was still active. No evidence exists that the previous train traffic along the rail line inhibited sheep movements. No sheep were reported struck by train traffic. Thus, it is believed that an active rail line would not be a significant barrier to sheep movements, and no further revisions to either the draft EIS/EIR or to Appendix F are necessary.

17. This response reflects that Table 5 of Appendix F in the draft EIS/EIR has been modified to change the current habitat designation for the desert pupfish from "ponds" to "backwaters along streams and pools."

18. This comment refers to a map in the Biological Assessment for the Section 7 consultation required by the Endangered Species Act and not the draft EIS/EIR. Figure 10 of Appendix F of the draft EIS/EIR is correct. For the Biological Assessment (Appendix N of the final EIS/EIR), correct distribution maps for desert pupfish found in California were obtained from Ms. Kim Nicol (CDFG). Figures 10a and 10b of the Biological Assessment reflect this correct information.

19. As suggested in this comment, this response acknowledges that although a flash flood in June 1990 reduced the pupfish population to two fish in a portion of the Salt Creek, additional surveys showed that this pupfish population had returned to pre-flood conditions by March 1991.

20. As suggested in this comment, the sentence has been reworded to eliminate any implication that the CDFG monitoring program represents mitigation. However, the results of the CDFG surveys will be used to assess the need for mitigation measures for routine rail operation. No significant impacts from routine operation are expected, but the potential exists for impacts. If necessary, MRC will do any additional monitoring activity deemed necessary by the BLM, USFWS, or CDFG.

21. Specific response procedures have been developed in conjunction with the Biological Assessment (Appendix N of the final EIS/EIR) required by the Section 7 consultation. The draft EIS/EIR states in Appendix F, p. 87, par. 3, that the USFWS and CDFG will be consulted if mitigation procedures are required after any rail accident that could affect desert pupfish populations. The USFWS, BLM, and CDFG will be notified immediately of any accidents occurring in the vicinity of desert pupfish habitat.

22. As originally envisioned, the BLM would receive the results of the raven monitoring program and then consult with other agencies as necessary. A Raven Monitoring Working Group consisting of representatives of the BLM, USFWS, CDFG, U.S. Park Service, MRC, and any other agency representative or individuals is recommended in the Biological Assessment (Appendix N of the final EIS/EIR).

23. There is some anecdotal evidence that tortoises will use culverts, although a long-term study of their effectiveness is lacking. Recommended mitigation in the draft EIS/EIR is for the use of culverts in association with barriers (Appendix F, p. 86, par. 5). The suggestion of relocating tortoises was made in case monitoring of tortoises indicates that they are not utilizing the culvert system.

24. As suggested in this comment, an 18-inch vertical tortoise-proof barrier will be installed on both sides of Eagle Mountain Road. MRC will regularly monitor the barrier/culvert system to check for sand buildup and provide subsequent sand removal; in addition, the system will be repaired and maintained throughout the life of the project.

25. Pages 467-468 of the draft EIS/EIR concur with this comment.

26. The procedures mentioned in this comment have been initiated.

27. All requirements of the California Fish and Game Code will be met.

28. The development of the draft EIS/EIR for the Eagle Mountain landfill project has been ongoing for more than two years, to date. During that time federal, state, and local agencies have been extensively consulted and their input into the document has been extensive. Not only has much of the baseline biological data come from these sources, but mitigation strategies have also been extensively discussed. Because of this, it is felt that the review period for both the draft EIS/EIR and draft Biological Assessment is adequate.

    Baseline monitoring studies for various species requiring mitigation for impacts will be concluded before any start-up of operations that would cause the impacts. The results of these studies may be used to modify mitigation plans if necessary. However, given existing studies, it is not believed necessary to complete these studies before the final EIS/EIR is certified.

DOCUMENT 0035 Letter from CSA 51 Advisory Board, September 3, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0036 Letter from Walt V. Hopkins, September 2, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0037 Letter from Mickey and Will Truitt, September 1, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0038 Letter from Riverside County Fire Department, August 29, 1991

1. The intermodal shipping containers are 40 × 8 × 8 feet in size with a storage capacity of about 284 cubic yards of material or 25 tons of compacted trash (page 48 of draft EIS/EIR). The containers are not sealed in the sense that they are watertight. The rear closure is a tightly fitting latched door that will prevent the escape of refuse. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. Additionally, dripping wet refuse will not be placed in the containers. For these reasons, the shipping containers are not expected to leak.

2. Liquid carbon dioxide has been used to control and extinguish deep landfill fires in a few instances, including one in Long Beach, California. The method is very speculative and likely would not work for large or long-lasting fires. The liquid CO_2 would not be stored on-site.

DOCUMENT 0039 Letter from Walter L. Rector, August 29, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0040 Letter from C.G. Boyd & Associates, Inc., August 28, 1991

1. A discussion of alternative landfill sites and alternative waste diverting techniques is presented in the draft EIS/EIR. See Responses 0020-5 and 0026-38.

DOCUMENT 0041 Letter from Riverside County Flood Control and Water Conservation District, August 9, 1991

1. A drainage report which contains a detailed description of the drainage system is included in Appendix L of the final EIS/EIR. The Specific Plan drainage discussion, including figures, has been updated. Also, see Responses 0001-111 to 116.

2. This comment is correct. Several inconsistencies occur in the drainage discussions in the draft EIS/EIR and the Specific Plan. These inconsistencies have been corrected in the drainage report discussed above. See Response 0041-1. Drainage channels throughout the project site will be designed in accordance with accepted practices and standards. Channels and other structures will be designed and sized to minimize velocities. Where velocities indicate possible erosion, the channels will be lined. Lining materials will consist of concrete or riprap as conditions dictate. Detention/settling basins and cut-off walls will also be used to mitigate drainage volumes and velocities. Drainage design will include free board allowances and use of dikes, where possible, to protect adjacent facilities and structures.

3. Maximum drainage impacts in this region are believed to occur during short-term, high-intensity summer storms. A 100-year 3-hour storm is the probable optimum storm event. It should be noted that the relevant regulatory stipulations to be complied with by the proposed landfill include the state (Title 14 of the California Code of Regulations and the California Integrated Waste Management Board) and federal (RCRA Subtitle D, the "open dump" criteria) regulations requiring that the landfill be protected from flooding or washout from a 100-year 24-hour storm (page 443 of the draft EIS/EIR). The drainage system has been designed to handle 100-year storm flows for the most critical events ranging from 1-, 3-, 6-, and 24-hour duration storms. In addition, a 500-year frequency standard will be adopted for conservative review of channel freeboard design.

4. See Response 0001-115. Consideration will be given to evaluation of the pre-mined, post-mined, interim, and ultimate stages of hydrological conditions associated with the project. Impacts on downstream properties will be reduced by a combination of on-site detention basins, flow-spreading structures, and energy dissipaters. Attention will be given to the potential downstream effects of project discharge relative to historic runoff.

5. Maintenance of all drainage facilities and structures will be borne by the operator of the landfill project. It is anticipated that some facilities may require specific operation and/or maintenance procedures. These facilities will be operated by trained personnel, retained by the project operator.

DOCUMENT 0042 Letter from Juana and Louis Gutierrez, July 25, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0043 Letter from San Bernardino County Museum, July 24, 1991

1. A paleontologic resource impact mitigation program may be found on pages 568-569 of the draft EIS/EIR. This same program should be part of the Specific Plan #252.

DOCUMENT 0044 Letter from Dorothy Harte, July 12, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0045 Letter from J.H. Reclamation, Inc., January 4, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0046A Letter from Eugene R. Boess, August 28, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0046B Letter from Eugene R. Boess, September 20, 1991

1. The issues in this letter do not question the adequacy and accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0047 Letter from Lorraine and Gilbert Sherman, September 2, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0048 Letter from Gilbert D. Sellan, August 30, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0049 Letter from City of Palm Springs, August 29, 1991

1. There have been seven Planning Commission hearings held to date on the proposed project. The Planning Commission will be making a recommendation to approve or not approve the project to the Board of Supervisors. CEQA does not require review of the document prior to a Board of Supervisors decision. However, NEPA allows for a 30-day review period prior to final approval by the BLM, and the Notice of Availability will be announced in the *Federal Register*.

2. The draft EIS/EIR provides a detailed analysis of the relative impacts of the proposed project and all the alternatives, including the Reduced Operations alternative. The potential increase in emissions resulting from the operation of the proposed project, compared to the "No Project" alternative is discuss in the draft EIS/EIR as well (see Appendix E, pp. 198-210). The mitigation measures proposed in the Air Quality section of the draft EIS/EIR (pp. 379-385) call for all trucks, trains, and on-site equipment to use fuels which comply with all applicable California Air Resources Board regulations. Also, see Response 0007-5. Since the preparation of the draft EIS/EIR, the project has been scaled down by reducing truck trips from 200 to 100 trips per day. This project modification is discussed in Section II.B.2 of the final EIS/EIR.

3. The emissions calculations presented in the draft EIS/EIR include emissions from activities in the Coachella Valley. The project activities which will generate emissions in the Coachella Valley are train and truck travel for the hauling of containerized waste to the landfill site. See Response 0026-8.

   Of the total 269-mile train route assumed in the draft EIR analysis, 78 miles are located within the Coachella Valley. The emissions associated with this rail travel are (a) NOx, 582 tons/year; (b) CO, 236 tons/year; (c) PM10, 14 tons/year; (d) ROG, 40 tons/year; and (e) SO_2, 74 tons/year.

   Emissions from truck hauling within the Coachella Valley cannot be quantified at the present time due to a lack of specific information regarding the locations of the MRFs, which would be the points of origin of the truck-hauled waste. As a worst case, one could assume that all of the truck-hauled waste originates within the Coachella Valley. Based on this worst-case assumption, the truck emissions associated with the project in the Coachella Valley would be (a) NOx, 157 tons/year; (b) CO, 74 tons/year; (c) PM10, 23 tons/year; (d) ROG, 25 tons/year; and (e) SO_2, 32 tons/year. Figure FEIR-AQ-2 (Attachment 2, Appendix M of the final EIS/EIR) compares the estimated project emissions from rail and truck travel in the Coachella Valley with estimates of emissions from all rail and truck travel in the Coachella Valley and with estimates of emissions from all sources in the Coachella Valley. In addition, Figure FEIR-AQ-3 (Attachment 2, Appendix M of the final EIS/EIR) shows relative impacts for the proposed project with mitigation and the "No Project" alternative for the Coachella Valley and the Eagle Mountain area.

4. It is unclear which mitigation measures the commenter is referring to. The mitigation measures contained in the draft EIS/EIR (pp. 379-383) clearly define the commitment by Mine Reclamation Corporation. Compliance with the Mitigation Reporting/Monitoring Program (Section II.C. of the final EIS/EIR) is required by the CEQA and NEPA process.

   The use of alternative fuels (such as methanol, natural gas, or liquefied petroleum gas) for locomotives and landfill equipment is discussed in the draft EIS/EIR (see Appendix E, pp. 115-117 and 120-121). Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from Eagle Mountain railway locomotives. The revised Mitigation Measure AQ-9 includes a specific timetable for conducting the feasibility study. A comparison of the emissions from the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M). It is not possible to commit to a specific timetable for implementing the use of alternative fuels in landfill equipment at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used at the Eagle Mountain project.

5. The proposed project includes accepting truck transported waste from local areas in Riverside and San Bernardino County up to 4,000 tons per day at full operation of the landfill. The Reduced Landfill Operations alternative would allow for 2,000 tons per day, retaining minimal truck transport to serve potential future demand in Riverside County which cannot be served economically by rail transportation. The Riverside County Solid Waste Management Plan estimates that the Coachella Valley will generate 1,330 tons per day of solid waste in the year 2005. Thus, the project has more than enough capacity to meet the future needs of Riverside County and, more specifically, the Coachella Valley. Riverside County will have the right to deposit up to 2,000 tons per day at the site without charge. Any additional tonnage shipped to Eagle Mountain would be charged as determined by the applicant at current market rates. It should be noted that since the preparation of the draft EIS/EIR, the number of trucks has been reduced by half from 200 to 100 trucks per day, which in turn reduces the amount of refuse transported daily by truck from 4,000 tpd to 2,000 tpd. A full description of this scenario is contained in Section II.B.2 of the final EIS/EIR. This minor modification will not affect the project's ability to meet the future capacity needs of Riverside County.

6. The draft EIS/EIR (Section IV.H.2) concludes that there will be a substantial beneficial impact to the public fiscal status of the local area (County Service Area 51). Impacts to

public facilities near the out-of-county transfer stations or transportation ways were not analyzed in detail because the size, location, and operation of any processing and transfer station would have to be determined by the community in which it is located. Because no significant fiscal impact was identified, NEPA/CEQA do not require "full fiscal impact analysis" as suggested by this comment.

DOCUMENT 0050 Letter from Allen T. Brown, August 30, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0051 Letter from Johnson & Johnson Development Corporation, August 30, 1991

1. As documented in the traffic analysis of Appendix D (page 1 of Appendix A), 35 trains pass the at-grade crossings of North Sunset Avenue and 22nd Street. The average daily traffic on 22nd Street is 5,669 and 530 on North Sunset. These two crossings have automatic gate protection. Trains are traveling approximately 40 MPH at these two crossings. At full capacity of 20,000 tpd, an average of 9.4 trains per day (both directions) will pass these intersections. Each train will be approximately 3,500 to 4,000 feet long. This calculates to approximately one minute average delay per passing at each of the two crossings. This is not considered a significant impact. See page 359 of the draft EIS/EIR for an explanation of the assumptions made for assessing the significance of vehicle delay times from potential rail haul waste disposal projects.

2. See Responses 0023-2 and 0005-1.

3. An average of 4.7 round-trip shipments per day (or 9.4 one-way trains) will utilize the primary rail segment when the project is operating at full capacity. The project is capable of receiving a maximum of six round-trip train trips per day (or 12 one-way trips) serving the container handling yard. The average delay created by increased rail traffic will be about 10 seconds per vehicle stopped at the Sunset Avenue and 22nd Street at-grade crossing. This should not serve to "cut off" the northern portion of the city of Banning from the southern portion.

4. See Responses 0023-2 and 0005-1.

DOCUMENT 0052 Letter from Riverside County Fire Department, August 21, 1991

1. Recycling, train repair, dust control, road building, and other industrial/service land uses will be integral to the project and not occur outside its boundaries. There are not likely

to be additional service demands other than enumerated in the draft EIS/EIR which will concern the fire department.

2. The design of the intermodal shipping containers would prevent their opening and leakage. For a description of the containers, please refer to Response 0030-3.

   This comment is correct. Riverside County Department of Health, as the Local Enforcement Agency, will have inspection rights for all solid waste coming to the project site. Compliance with the standards of hazardous waste removal will be enforced by on-site inspectors directed by and with authority of the Local Enforcement Agency. See pages 332 of the draft EIS/EIR.

3. See Response 0038-2.

4. This comment raises a legitimate concern about the availability of emergency medical services at the town of Eagle Mountain. The potential would exist at the landfill for any variety of accidents which may require all levels of emergency medical services. The mitigation measures have been clarified to require that the project applicant share in the fire staffing requirements at the Eagle Mountain station to an emergency medical services level of training required by the Riverside County Fire Department. This mitigation measure appears on the Mitigation Reporting/Monitoring Program (Section II.C. of the final EIS/EIR). See Response 0001-128.

5. The draft EIS/EIR on page 533 acknowledges the project will be required to contribute to the funding of the fire improvements. See Response 0001-128.

DOCUMENT 0053 Letter from Office of the Mayor, Cathedral City, August 27, 1991

1. The concerns raised in this comment are more appropriately raised with the Riverside County Solid Waste Division. The draft EIS/EIR identifies alternative waste disposal options and concludes that even with active recycling, yard waste composting, and other source reduction techniques, the need for a large-scale or a number of smaller-scale landfill projects in the region would still be present. Premature landfill closings would only exacerbate this problem. Moreover, this comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no other response is necessary.

2. As required by the State Health and Safety Code (Division 20, Chapter 6.95), Southern Pacific's Emergency Response Plan, Spill Prevention Control Contingency Plan, and Tier II Chemical Inventory Forms are filed every year with all administering agencies, including the health departments of Riverside and San Bernardino counties and the California Public Utilities Commission. In addition, General Order 161 of the California Public Utilities Commission (effective 8/7/91) requires Southern Pacific to file the

emergency response plan, traffic density data by line segment, lease and storage inventories, and a list of 24-hour emergency contact telephone numbers with any emergency response agency (such as fire departments) within 60 days of receiving a written request from the agency. In addition, as part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers to supplement Southern Pacific staff and to accomplish trash pickup as necessary (draft EIS/EIR, page 352). The other public health concerns presented in the comment are discussed in the Public Health and Safety section (IV.B.) of the draft EIS/EIR. See Response 0026-3 for more details of Southern Pacific's emergency response plan.

3. Page 543 of the draft EIS/EIR explains that the noise level increase of 0.7 dB that would be experienced by residential areas 100 feet from the Southern Pacific rail line is not discernible by people and therefore not considered a significant impact (*Fundamentals and Abatement of Highway Traffic Noise,* by Bolt, Beranek, and Newman, Inc., prepared for the Federal Highway Administration, June 1973, page 1-20). A noise barrier would not be necessary for such a small increase.

DOCUMENT 0054 Letter from Mel Ballen, September 4, 1991

1. To clarify the potential water quality impacts, please refer to Response 0001-25.

DOCUMENT 0055 Letter from U.S. Department of the Interior, Bureau of Mines, August 30, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0056 Letter from Marilyn, Maurice, and Joshua Beidler, August 27, 1991

1. For a discussion of mandatory recycling efforts in southern California, please see Response 0006-1. As a compliance requirement of AB 939, green waste material will likely be removed from the waste stream for composting at the MRFs and transfer stations.

2. Section IV.D of the draft EIS/EIR (page 368) discusses the air quality impacts associated with the project, including emissions from train and truck transport. For a summary of air quality impacts to residences in the Coachella Valley, please refer to Response 0012-1.

3. Section IV.A of the draft EIS/EIR (page 317) discusses the potential for groundwater impacts resulting from the proposed project. Please refer to Response 0001-25.

4. The Mineral Resources section (IV.I.3) of the draft EIS/EIR (page 487) provides a detailed discussion of the mineral reserves, including iron ore, at Eagle Mountain. The proposed phasing of the landfill project would assure that the most potentially minable iron resources are impacted last. Such sequencing would allow approximately 75 years to recover the ore if economically justified. The proposed landfill operations at Eagle Mountain, particularly reactivating the rail line, could benefit possible future mining operations. It should be noted that any such future mining would require environmental review and land use permits.

DOCUMENT 0057 Letter from R. J. Arden, received September 10, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0058 Letter from Mancy and Murray Olderman, September 5, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0059 Letter from National Parks and Conservation Association, September 5, 1991

1. As discussed on page 413 of the draft EIS/EIR, project impacts were based on extremely conservative modeling assumptions. Mitigation Measure AQ-23 (Appendix E, page 130) required a reanalysis of ambient air quality impacts using meteorological monitoring data collected on-site. This revised modeling using weather data collected on-site has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. The results of the revised modeling show that project impacts at the Joshua Tree National Monument will not exceed federal Class I or II increments. Therefore, the results of the revised air quality modeling do not indicate a need for any mitigation measures in addition to those specified in the final EIS/EIR.

2. The proposed project site is located southeast of Joshua Tree National Monument and at its closest point is approximately 8,000 feet south of the boundary. Numerous design features have been incorporated into the proposed project which would ensure that windblown debris generated from the proposed landfill would be minimal. Please refer to pages 515-516 for a description of the proposed mitigation measures to minimize impacts of windblown debris. In the event that JTNM or BLM staff observe or receive reports of problems developing with windblown debris, there will MRC operations

personnel assigned to litter control that can be contacted to ensure the timely retrieval of stray litter.

3. The draft EIS/EIR points out, "The project area is not within the boundaries of JTNM and will have no direct impact on its recreation values, uses, or opportunities for camping, hiking, backpacking, photography, wilderness use, or nature study" (p. 521). In fact, Joshua Tree National Monument at its closest point is approximately 8,000 feet south of the project boundary. Figure 91 shows that a ridgeline protects the monument's viewshed from the project area.

4. The draft EIS/EIR discusses the project's impact on Coxcomb Mountains, Eagle Mountains, Pinto Basin, and Chuckwalla Mountains WSAs on pages 524-527. The draft document concludes that the significance of impact after implementation of the design features will not impair the suitability of adjacent WSAs for preservation as wilderness.

5. The draft EIS/EIR (pages 450 and 451) outlines the raven control and monitoring program. In general, the passive raven control program includes trash burial at the end of each workday at a minimum, prompt removal of large road-killed animals from the truck route, hazing, and other nonlethal measures to minimize raven feeding at the project site. If, through the monitoring program, the raven population is found to be increasing, an active raven control program would be initiated. This would include the destruction of individual raven nests and/or animals.

6. Noise impacts on Joshua Tree National Monument and wilderness areas are discussed on page 556 of the draft EIS/EIR. Due to distance and the intervening barrier of the Eagle Mountains, noise levels from project operations would not be considered significant.

7. Potential night lighting impacts on the national monument and wilderness areas will be reduced by implementing the proposed design features including limitation of night activities, type of lighting, and truck traffic routing. More specifically, the significance criteria for night lighting was generated from consultation with JTNM staff who feel that lighting for lower-elevation ground uses would not be a problem. Floodlighting and high-pressure sodium fixtures would cause unnecessary spillage of light resulting in a significant impact; therefore, directed "spot" lighting is recommended.

DOCUMENT 0060A Letter from Tom Glenn, September 4, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0060B Letter from Tom Glenn, September 11, 1991

1. The draft EIS/EIR addresses landfills in counties where waste is generated (page 105). Other potential sites in these areas were not analyzed in further detail because of their limited capacities and because adequate information is not currently available regarding the description of projects at these sites. Furthermore, this comment does not address the adequacy or accuracy of the draft EIS/EIR.

2. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

3. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

4. See Responses 0001-4, 5, 7, 8, 10, 15, 18, 25, 33, 111, and 112 and 0002-4 and 6.

5. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program for the removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain. For a discussion of hazardous material screening, please refer to Response 0002-8.

6. The draft EIS/EIR does not suggest that the economic benefits of the proposed project serve as mitigation for any significant impacts associated with the proposed project.

7. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

8. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0061 Letter from Lucille and Cliff Busse, September 3, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0062 Letter from Lewis L. Warner, September 3, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0063 Letter from Jean M. LaRoss, September 5, 1991

1. The assessment of air quality impacts resulting from the proposed project takes into consideration the amount of exhaust emissions produced from the combustion of diesel fuel during transport and on-site handling of solid waste (see pages 374 and 375 and Table 25 of the draft EIS/EIR).

2. Please refer to Response 0026-66.

3. Cumulative air quality impacts are discussed on page 592 of the draft EIS/EIR.

4. See Response 0006-1. The removal of recyclables from the waste stream, as mandated by law (AB 939), will be the responsibility of the MRF and transfer station operators. Compliance with these standards of removal will be enforced by on-site inspections performed by the Local Enforcement Agency (Riverside County Department of Health). MRC will only indirectly enforce compliance with AB 939 through the mechanism of not accepting residual waste unless recyclables (and hazardous materials) have been removed.

DOCUMENT 0064 Letter from Margaret Schmidt, September 4, 1991

1. For a discussion of air quality impacts, please refer to Section IV.D. of the draft EIS/EIR commencing on page 368.

2. See Response 0021-19.

3. A discussion of cumulative impacts of all past, present, and reasonably anticipated future projects is presented on pages 585-598 of the draft EIS/EIR.

DOCUMENT 0065 Letter from Nanette McMahon, no date

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0066 Letter from Jean Spier, September 6, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0067 Letter from Arlene Pallenberger, no date

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0068 Letter from Joseph W. Monroe, September 4, 1991

1. It is unclear what the commenter means by "loose materials." The draft EIS/EIR discusses in great detail the air emissions associated with haul vehicles and on-site stationary equipment (see Appendix E, pp. 70-105). In addition, the draft EIS/EIR discusses recommended mitigation measures for these emission sources (see Appendix E, pp. 105-133).

2. Please refer to Responses 0006-1 and 0011-1. In conformance with AB 939, recyclable materials will be recovered from the MRFs and transfer stations. Compliance with the standards of removal of recyclable material will be the responsibility of the operators of the MRFs and transfer stations. These regulations will be enforced by on-site inspectors directed by and with the authority of the Local Enforcement Agency (Riverside County Department of Health). MRC will indirectly enforce these requirements by not accepting residual wastes unless the recyclable materials have been removed.

DOCUMENT 0069 Letter from Jana Thompson, September 4, 1991

1. Please see Responses 0012-1 and 0017-12.

DOCUMENT 0070 Letter from U.S. Department of Transportation, September 6, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0071 Letter from Virginia O'Connor, September 8, 1991

1. See Response 0012-1. Cumulative air quality impacts are discussed on page 592 of the draft EIS/EIR.

2. As outlined on pages 39, 40, 331, and 332, hazardous wastes derived from the landfill operation and the small quantities of hazardous materials recovered from the on-site waste inspection station will be collected and temporarily stored on-site. Wastes will be segregated and containerized as required by regulations. These wastes will be periodically removed from the site for delivery to a licensed hazardous waste facility. Trans-

portation of these wastes will be by licensed hazardous waste carriers under manifest as required by state law.

DOCUMENT 0072 Letter from Madalene Good, September 7, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0073 Letter from Desert AG Services, September 5, 1991

1a. As noted in the draft EIS/EIR (page 322), monitoring/detection wells will be "placed down-gradient close to the margin of the landfill." Analysis of the fractures and sedimentary strata has indicated the best locations for earliest detection/monitoring.

1b. Please see Responses 0001-8, 15, 18, 25, and 33. The mitigation measures for the protection of groundwater, as identified in the draft EIS/EIR (pages 320-323), include a system of waste acceptance criteria, drainage controls, leachate collection and control, landfill gas collection and control, and a redundant barrier system that in combination reduce the potential for groundwater contamination to a level of insignificance. Leachate is not expected to be generated at the landfill because of the climate and the dry nature of the waste that will be received. As an additional mitigation measure, to prevent leachate from building up pressure necessary to cause any leakage, the site will be provided with a blanket leachate collection and removal system that is designed to remove any leachate, should any leachate be generated. For a more detailed description of the containment system, please see Section II.B.1 of the final EIS/EIR.

2. Please refer to Responses 0001-111 through 116. The drainage system will be designed to handle 100-year storm flows for the most critical events ranging from 1-, 3-, 6-, and 24-hour duration storms. In addition, a 500-year frequency standard will be adopted for review of channel freeboard design. The drainage plan will divert all runoff away from the landfill as well as provide interim cover that is designed to prevent infiltration and percolation of rainwater that falls on the landfill. It is not possible for a failure of this system to result in several hundred acre-feet of water being dumped into the fill site that will result in the generation of leachate, because only rainwater that falls directly onto the open face of the landfill will be covered with either interim or final cover which is designed to drain runoff and prevent percolation. Additionally, if an entire year's rainfall fell onto the open face of the landfill in one storm event, this would only cause the upper one foot of refuse to reach the field capacity required for leachate to be released from the refuse mass. Since a day's volume of refuse is usually 20 to 30 feet thick, there is insufficient water in the 100-year storm events to cause the refuse to reach a point of saturation where leachate will be generated. The drainage report is contained in Appendix L of the final EIS/EIR.

3. The monitoring of the foundation and monitoring layer, immediately beneath the barrier system, as well as the groundwater several hundred feet below the barrier system, will serve to evaluate the performance of the barrier system. If there is leakage through the barrier system, it will be detected immediately beneath the system, long before any leachate would reach the groundwater. The assumption that a "continuum of leachate" leakage would continue is incorrect because leachate will continually be pumped out of the leachate collection system to prevent a buildup needed for a continuous source of leakage. Additionally, if monitoring indicates a buildup of leachate within the removal system, additional cover material can be added to further reduce the amount of precipitation that would be the main cause of leachate generation. If the leachate is collected and removed as proposed in the draft EIS/EIR (pages 60-65 and 320-323), there will not be a source of leachate that could leak and contaminate the groundwater.

4. Please see Response 0001-33.

5. This comment does not address the adequacy or accuracy of the draft EIS/EIR. A discussion of potential groundwater impacts resulting from the proposed project can be found in Section IV.A. of the draft EIS/EIR. Also, see Response 0001-25.

6. Air quality impacts resulting from the proposed project are discussed in Section IV.D. of the draft EIS/EIR. Since this comment does not address the adequacy or accuracy of the draft EIS/EIR, no further response is necessary.

7. Without specific examples of "conscienceless wildlife habitat compromises," no response to this comment can be given. The biological impacts resulting from the proposed project and recommended mitigation measures are outlined in Section IV.G. of the draft EIS/EIR. A more detailed description of mitigation measures can be found in Appendix F of the draft EIS/EIR and the Biological Assessment (Appendix N of the final EIS/EIR).

8. A discussion of potential traffic impacts can be found in Section IV.C. of the draft EIS/EIR. Since this comment does not address the adequacy or accuracy of the draft EIS/EIR, no further response is necessary.

9. Please refer to Response 0006-1. AB 939 is a mandatory recycling program requiring a 25 percent reduction in waste by the year 1995 and a 50 percent reduction in waste by the year 2000. Pages 105-109 of the draft EIS/EIR discuss recycling, composting, and other forms of waste source reduction in greater detail. Nevertheless, the implementation of these waste diversion programs would not eliminate the need for a large-scale or number of smaller-scale landfill projects in the region.

   For refuse destined for landfilling at Eagle Mountain, each transfer station and MRF would be required to initiate their own load-checking program as required under the facility permit and is not part of the proposed project. However, as part of the proposed project, MRC would institute a periodic inspection program at the landfill to monitor the continued compliance and effectiveness of the load-checking programs. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the LEA (County of Riverside Department of Health). MRC would not accept residual wastes at Eagle Mountain unless the hazardous wastes and recyclables have been removed.

DOCUMENT 0074 Letter from G.T.J. Enterprises, September 16, 1991

1. Please see Response 0026-75 for a discussion of pyrolitic conversion of trash-to-energy.

DOCUMENT 0075 Letter from Marilyn Beidler, August 30, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0076 Letter from John R. Warner, September 12, 1991

This letter was mailed to both the Riverside Planning Department and the Bureau of Land Management area offices. The concerns expressed in these letters are similar in nature and thus, for the sake of economy, appear only once in the final EIS/EIR and are addressed below. All letters submitted are on file at the County and the BLM area offices.

1. Refuse being transported to the site by truck or train would be compacted in closed containers. For a description of the containers, please see Response 0021-25. The measures taken during the transport and deposit of refuse at the working face of the landfill and the application of the daily cover would minimize the attraction of animals, birds, and insects to the project site. See Response 0026-9. A description of this process is found on pages 51, 57, 58, and 345-346 of the draft EIS/EIR.

2. Burning refuse is not a viable alternative in southern California due to the present air quality conditions in the Los Angeles basin and surrounding area. See Response 0026-75. Mitigation measures to reduce emissions generated by project operations presented on pages 380 and 381 of the draft EIS/EIR address alternatives to diesel engines and trucks, including the electrification of the Eagle Mountain railway and landfill equipment. In summary, when the landfill gas generation is sufficient to warrant the construction of an energy recovery facility at the project site, a cost/effectiveness study of electrifying the Eagle Mountain railway to reduce locomotive emissions shall be conducted. Also, in lieu of diesel-fueled versions, MRC shall purchase and use electric versions of landfill equipment such as overhead cranes, crushers, conveyors, and

pugmills wherever available. Where not available, alternative-fuel technology will be used depending on air permitting standards. Other alternative measures to diesel fuel are evaluated in the draft EIS/EIR (pages 385 and 386; and Appendix E) but are not considered feasible at the present time.

3. The scientific community is still debating the effects that CO_2 emissions have on global warming. Therefore, it highly speculative at this point to determine the effect (if any) CO_2 emissions from the proposed project would have on global warming.

DOCUMENT 0077 Letter from Hallock Hoffman, September 4, 1991

1. Please refer to Response 0021-25 for a description of the intermodal shipping container.

2. Please refer to Response 0026-3. In the event of a rail accident, the emergency response plan would be enacted. Public Safety of the Public Health and Safety section (see pages 147-148 and 351-355 of the draft EIS/EIR) discusses the risk accidental spillage of nonhazardous compacted municipal waste poses to public health and safety. With implementation of mitigation measures such as providing staff to assist in the removal of spilled waste in the event of an accident, public safety impacts due to accidental spillage would be below a level of significance.

3. As part of Title 14, Chapter 3, of the California Code of Regulations, MRC will develop a standard set of procedures for employee activity with respect to all phases of landfill operations. Please refer to Section IV.B.5 of the draft EIS/EIR for a discussion of these procedures.

4. The proposed Class III landfill will only accept nonhazardous solid waste and inert wastes. Mandatory procedures for detection, collection, temporary storage, and off-site disposal to a licensed hazardous waste disposal facility would be implemented at the MRFs and transfer stations as part of their facilities permits. A description of this process can be found in the draft EIS/EIR (pages 39, 40, 48, 49, and 331-333). Also, please refer to Response 0026-4.

5. Because of the very dry climate at Eagle Mountain, the dry nature of the refuse, and the fact that liquids will not be accepted into the landfill, it is expected that refuse decomposition rates in the landfill will be very slow. For these reasons, the production of leachate in the landfill mass is expected to be minimal, if at all.

6. The draft EIS/EIR (Section IV.D.) discusses air quality impacts resulting from truck and train activity serving the landfill site. As described on pages 356 and 357 of the draft EIS/EIR, the number of daily train trips required when the landfill is operating at full

capacity would be 9.4 with a maximum of 12 round trips daily. See Response 0012-1 for a discussion of air quality impacts to the Coachella Valley.

DOCUMENT 0078 Letter from Upper San Gabriel Valley Municipal Water District, September 17, 1991

1. This letter and its attached resolutions do not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0079 Letter from Mr. & Mrs. James Johnson, September 18, 1991

1. Three letters were received by the County of Riverside and the Bureau of Land Management area offices expressing opposition to the project. These letters are almost identical in content and thus, for the sake of economy, appear only once in the final EIS/EIR. However, all letters submitted are on file at the County and the BLM area offices. None of the letters question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

DOCUMENT 0080 Letter from City of La Quinta, September 19, 1991

1. The Coachella Valley and the Chuckwalla aquifer are not connected. Moreover, for protection of the Chuckwalla aquifer from groundwater contamination, the project design includes the installation of a composite liner, a drainage control system, a leachate collection system, a landfill gas collection system, daily compacted soil cover of refuse, project phasing, and groundwater monitoring wells. See Response 0001-25. For additional regulations concerning the liner, please see Response 0021-16.

2. Please refer to Responses 0012-1 and 0017-12.

3. The draft EIS/EIR (page 351) states that the project itself and the operation of off-site transfer stations to serve the project would not be expected to increase the frequency of accidents involving solid waste transport, when considered in terms of accidents per ton-mile of transport. Emergency response plans are already in place at the local government level, as part of federal and statewide programs. As part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers and trash pickup as necessary (see Response 0026-3).

DOCUMENT 0081 Letter from Myrt Griffin, September 18, 1991

1. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0082 Letter from State Building and Construction Trades Council of California, September 18, 1991

1. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0083 Letter from K. H. Carabio, September 17, 1991

1. The comment does not define the geographical area of interest. One method that may be used to compare project emissions with existing emissions from vehicles and trains is to examine the project impacts on the Coachella Valley. The emissions calculations presented in the draft EIS/EIR include emissions from activities in the Coachella Valley. The project activities which will generate emissions in the Coachella Valley are train and truck travel hauling containerized waste to the project site.

   Of the total 269-mile train route assumed in the draft EIS/EIR analysis, 78 miles are located within the Coachella Valley. The emissions associated with this rail travel are (a) NOx, 582 tons/year; (b) CO, 236 tons/year; (c) PM10, 14 tons/year; (d) ROG, 40 tons/year; and (e) SO_2, 74 tons/year.

   Emissions from truck hauling within the Coachella Valley cannot be quantified at this time due to a lack of specific information regarding the location of MRFs, which would be the points of origin of the truck-hauled waste. As a worst case, one could assume that all of the truck-hauled waste originates within the Coachella Valley. Based on this worst-case assumption, the truck emissions associated with the project in the Coachella Valley would be (a) NOx, 157 tons/year; (b) CO, 74 tons/year; (c) PM10, 23 tons/year; (d) ROG, 25 tons/year; and (e) SO_2, 32 tons/year.

   Thus, it is estimated that in the Coachella Valley, the truck and train emissions associated with the proposed project would amount to 739 tons/year of NOx, 37 tons/year of PM10, and 65 tons/year of ROG. Based on information derived from the SCAQMD emissions inventory (a linear extrapolation between the 1987 baseline values and the year 2000 estimate), it is estimated that 1991 vehicle and train emissions in the Coachella Valley amount to 15,311 tons/year of NOx, 2,415 tons/year of PM10, and 7,226 tons/year of ROG (see Table FEIR-AQ-6, Appendix M, Attachment 2, of the final EIS/EIR).

2a. Recyclables sent to Eagle Mountain for storage will be shipped to the site in closed containers, identical with those being used for the shipment of waste. These containers will be shipped using the same trains that carry waste to the site, but will be prominently identified as containing recyclables for storage. When required, the recyclable containers will be reloaded on the trains for shipment back to the source.

2b. Table 51 of the draft EIS/EIR has been corrected to show that rail haul operations will use 21,404 gallons of diesel fuel per day, and transfer station operations would use 2,160 gallons of fuel per day. This revision is noted in Section VI of the final EIS/EIR.

2c. The use of low-emission fuels would be enforced through the requirements of the air quality permits issued by the SCAQMD for the proposed project. The air quality permits would require the use of fuels meeting certain specifications, as well as detailed record keeping attesting to the amount and type of fuel purchased. With this information, the district can ensure that fuel used by the project is in compliance with permits requirements.

3. The proposed project site is located southeast of Joshua Tree National Monument and at its closest point is approximately 8,000 feet south of the boundary. Project impacts on surrounding recreation uses, including JTNM, and wilderness areas are discussed on pages 520-528 of the draft EIS/EIR. The draft concludes that the project will have no direct impact on JTNM with respect to its recreation values, uses, or opportunities for camping, hiking, backpacking, photography, wilderness use, or nature study. For a specific discussion on air quality impacts to JTNM, please see Response 0059-1. Noise impacts to JTNM are discussed in Response 0059-6. Page 413 of the draft EIS/EIR discusses the impact of fugitive dust emissions on JTNM. The most important receptor of fugitive dust in the project area is the JTNM boundary. Impacts to the ambient concentrations at the monument boundary are presented in Table 34 in the draft EIS/EIR.

Regulation IV, Rule 403, specifically states that ". . . a person shall not cause or allow the emissions of fugitive dust . . . such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source . . . ." The rule also says that ". . . every reasonable precaution [shall be taken] to minimize fugitive dust emissions from . . . solid waste disposal operation." Suspension of activity during winds in excess of 25 miles per hour was not considered as a separate mitigation measure since virtually all sources of fugitive dust would have active dust control programs applied to them.

Mitigation measures to minimize impacts from fugitive dust emissions are discussed in Responses 0003-29 and 30.

4. The long-term survival rate of transplanted tortoises is not known at this time. This issue is being studied; however, results will not be available in time for incorporation into the initial phases of this project. Any tortoises that would be moved, either during construction of Eagle Mountain Road or during rail line maintenance or operation, would only be displaced a maximum of 300 feet (see draft EIS/EIR, pp. 450; Appendix F, pp. 85-87), a distance likely to keep the tortoise within its current home range. It is not anticipated that such a short movement would cause significant impacts to tortoise survival. No

Category 1 habitat would be directly impacted by this project, and any potential indirect impacts would not be significant. As a worst-case scenario, 150 acres of Category 3 tortoise habitat would be impacted from the expansion and extension of Eagle Mountain Road (see draft EIS/EIR, pp. 447-448). Dust impacts can be found on pages 377-379 and 514-516.

DOCUMENT 0084 Letter from Building and Construction Trades Council of San Bernardino and Riverside Counties, September 18, 1991

1. Although this letter does not comment on the adequacy or accuracy of the draft EIS/EIR, it raises several issues of concern associated with the proposed project. In response, it should be noted that the draft EIS/EIR concludes that the groundwater will not be adversely affected by the landfill (see Response 0001-25). With respect to traffic impacts, the draft EIS/EIR (page 363) states that the proposed project would generate a two percent increase in traffic on I-10. This incremental increase in traffic is not considered a significant traffic impact. Furthermore, since the preparation of the draft EIS/EIR, MRC has proposed to reduce the round-trip truck traffic from 200 to 100, which would further reduce traffic impacts. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck trips.

DOCUMENT 0085 Letter from Dorothy Harte, September 15, 1991

1. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0086 Letter from City of Walnut, September 12, 1991

1. The duration of Phase I operations is not linked to a particular time frame but instead to the use and capacity of the Phase I handling yard. The maximum capacity of the initial container handling yard would be approximately 4,750 tons per day consisting of one trainload of refuse per day (3,500 tpd) and an additional 1,250 tpd that would be delivered by truck. When this volume is exceeded, Phase II operations would commence.

2. This comment does not question the adequacy or accuracy of the draft EIS/EIR but is welcomed for the suggestion of the use of an alternative type of lighting. Metal halide lights will be evaluated during the final design stages of the project.

3. The precise locations, designs, and operational details for future MRFs and transfer stations are unknown at this time. Please refer to Response 0015-2 for a discussion of transfer stations.

4. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0087 Letter from Office of the Mayor, City of Blythe, September 17, 1991

1. The groundwater gradient from the Eagle Mountains slopes to the southeast in the Chuckwalla Valley, turns southward toward I-10, then again to the east through Palen and Ford dry lakes towards the Colorado River. The regional groundwater potentiometry has been studied by others and reviewed by the project hydrologist. If the landfill were to leak, and with no mitigation whatsoever, by the time it could get to the Colorado River, the concentration effects would be insignificant. Based on the state-of-the-art measures of the proposed project working together to protect the area's groundwater resources from degradation, the draft EIS/EIR concludes that the groundwater will not be adversely affected by the landfill. Also, see Response 0001-25.

2. Please see Responses 0001-3, 4, 6, 7, 21, 23, and 24. Many landfills throughout the state have been designed, constructed, and operated to withstand the effects of the ground shaking resulting from earthquakes. The permitting process will require the implementation of the applicable state and federal regulations which would assure that the liner design ensures the integrity of the liner during seismic events and the static loading of the refuse. As per the active fault evaluation prepared by geologist Richard Proctor, the maximum probable earthquake acceleration at the Eagle Mountain site is 0.1 g (gravity). However, MRC plans to design all major facilities at the site to 0.2 g, or essentially double the state requirements.

3. For the same reasons discussed in Response 0087-1, no significant groundwater effects would occur to the correctional facility.

4. Section VI of the final EIS/EIR (see reference for pages 574 and 579, and Tables 51 and 53) contains revised information on the fuel required for this project and its alternatives (discussed on pages 572-584 of the draft EIS/EIR). The impacts to air quality are quantified in the Air Quality section of the draft EIS/EIR beginning on page 368. Energy consumption impacts are discussed in Section IV.O. of the draft EIS/EIR. Traffic impacts and its associated safety hazards are discussed in the Traffic and Public Health and Safety sections (IV.C. and IV.B., respectively) of the draft EIS/EIR.

5. It is unclear why the commenter believes that emissions from the proposed project would be trapped in the Desert Center area. The Desert Center area is located in the Chuckwalla Valley, which is open to the east all the way to the border with Arizona. This "opening" would provide an avenue for ventilation/air exchanges. Odor impacts from the proposed project are addressed in Response 0001-97.

6. Please refer to Response 0006-1 for a discussion of mandatory recycling programs in the region.

DOCUMENT 0088A Letter from Kenneth Statler, no date

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0088B Letter from Kenneth Statler, no date

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0089 Letter from County of Riverside Parks Department, September 12, 1991

1. Following discussions with Jeff Weinstein of the Riverside County Parks Department, it was concluded that the location of the proposed trails and their use density would pose no conflict with the use of the Eagle Mountain rail line. One of the County's proposed trails is located between the Salton Sea and Highway 111 and hence is not at all impacted by the Eagle Mountain rail line. The second trail parallels the Coachella Canal and will therefore have a single crossing of the rail line. The density of use at this location is expected to be extremely low; hence, no significant impacts will result.

2. The California Department of Fish and Game and the U.S. Fish and Wildlife Service have been consulted extensively for their input on plant and wildlife species in the region of Eagle Mountain. Not only are these agencies reviewing and commenting upon the draft EIS/EIR, but they are also involved in review of the Biological Assessment (Appendix N of the final EIS/EIR) which was developed for compliance with federal and state Endangered Species Acts.

DOCUMENT 0090 Letter from Janet Cook, September 15, 1991

1a. See Response 0087-4 for a breakdown of the fuel consumption from refuse transportation, including trains. Rail haul operations, as proposed, will use approximately 21,404 gallons of diesel fuel per day, and transfer station operations would use 2,160 gallons of fuel per day.

1b. The overall energy consumption of this project was determined to be not wasteful, inefficient, and unnecessary. However, because the United States is overall an importer of fossil fuels, this project will contribute to that importation. Whether importation of fossil fuel causes a trade deficit is dependent on the country's exports and is not a relevant discussion in this draft EIS/EIR.

2. Project impacts associated with the proposed landfill on Joshua Tree National Monument can be found on pages 409, 413, 418, 439, 451, 516, 518, 521, 525, 528, and 556 of the draft EIS/EIR. Revegetation is discussed in the draft EIS/EIR on pages 493, 509, 512 and 513. See Response 0083-4 for consideration of overall impact to the desert tortoise by implementation of this project.

DOCUMENT 0091 Letter from City of Desert Hot Springs, September 16, 1991

1. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0092 Letter from Karen S. Elam, September 16, 1991

1. Response 0012-1 discusses the significance of the air quality impacts in the South Coast and the Southeast Desert air basins. Cumulative air quality impacts are addressed on page 592 of the draft EIS/EIR.

2. Landfill siting studies have been conducted in Orange County. In addition, SANDAG has prepared a feasibility study and a general environmental assessment of transporting waste by rail to nine remote desert centers in Los Angeles, San Bernardino, Riverside, Imperial, and Kern counties. A discussion of these alternative sites can be found on pages 77-104 of the draft EIS/EIR. The draft EIS/EIR (page 105) also addresses landfills in counties where waste is generated. Other potential landfill sites in Los Angeles County were not analyzed in further detail because of their limited capacities and because inadequate information is currently available regarding the description of projects at these sites. Consequently, they were deemed, at this time, to be remote and speculative.

DOCUMENT 0093 San Bernardino County Air Pollution Control District, September 9, 1991

1. The section of the draft EIS/EIR cited by the commenter (Section III.D.) discusses the air quality setting of the South Coast and Southeast Desert air basins rather than project impacts on air quality. The relative air quality impacts of the proposed project and of all the alternatives, including the "No Project" alternative, are discussed in Section IV.D. and in Appendix E of the draft EIS/EIR for the South Coast Air Basin as well as for the Southeast Desert Air Basin.

The section on air quality trends in the draft EIS/EIR (Section III.D.4) discusses the maximum ambient concentrations found in the Southeast Desert Air Basin. This analysis was done by reviewing data contained in "California Air Quality Data," published by the California Air Resources Board; this document lists data for all monitors located in the Southeast Desert Air Basin, including data collected at the San Bernardino County Air Pollution District's Twentynine Palms monitoring station.

A discussion of the San Bernardino County Air Quality Attainment Plan was not included in the draft EIS/EIR because the proposed project is not located in San Bernardino County.

2. All of the emissions from the equipment associated with the project are discussed in the draft EIS/EIR (Appendix E, pp. 72-91). This discussion includes tables which showed the worst-case daily emissions from the equipment in question. In addition, mitigation measures are discussed in Appendix E, pp. 105-131, of the draft EIS/EIR.

3. As discussed in Response 0093-1 above, the relative impacts of the proposed project and all alternatives are discussed in the draft EIS/EIR separately for the Southeast Desert and the South Coast air basins (see Appendix E, pp. 204-210).

   Response 0117-3 includes further discussion regarding the relative impacts of the proposed project. As discussed in this response, the estimated impacts from the proposed project in the Coachella Valley will result in an increase above the estimated 1991 emissions baseline for the area. The emission increases are approximately 3.8 percent for NOx, approximately 0.5 percent for ROGs, and approximately 0.06 percent for PM10 emissions. There are no approved regional air quality models which can be used to perform the analysis requested. Regional photochemical models, such as those used to prepare regional air quality plans, are not suitable for this purpose, because they are insensitive to changes in emissions which are less than five percent of the regional total. The emissions changes associated with the Eagle Mountain project are below this sensitivity threshold in the South Coast and Southeast Desert air basins and in the Coachella Valley. Due to the lack of an adequate modeling tool, it would be speculative to attempt to quantify the ozone impacts from the proposed project. The analysis in the draft EIS/EIR was performed using the best analytical tools available.

4. See Response 0093-3 above.

5. Aside from the Eagle Mountain project, the only other regional landfill proposed to be located in either Riverside or San Bernardino counties is the proposed Rail-Cycle landfill (Bolo Station) near Amboy, in Riverside County, which was discussed in the draft EIS/EIR. Similar to the Eagle Mountain project, the Rail-Cycle project intends to transport municipal refuse from urban transfer stations located at several sites in Los

Angeles, San Bernardino, and other counties in southern California. At each transfer station, refuse will be processed for removal of recyclable materials and the remainder will be compacted and placed in shipping containers. The containers will be loaded onto double-stack unit trains for transport to the landfill site near Amboy. The Rail-Cycle project is a cut-and-fill operation where 20-acre modules will be excavated, lined, and filled with refuse. Excavated materials will be temporarily stockpiled on-site for later use as either daily or final cover. According to the land use application for the Rail-Cycle project (dated December 13, 1990), at ultimate project development, the Rail-Cycle project will receive approximately 21,000 tons of refuse per day. The estimated service life of this project ranges from 66 to 100 years, depending on the refuse delivery rate.

As is the case for the Eagle Mountain project, emissions from the Rail-Cycle project will be associated with five activities: urban transfer stations, waste transport, on-site vehicles, cover material handling, and landfill gas combustion. Vehicle emissions at the urban transfer stations will generate "tailpipe" emissions. Transport of the refuse from the metropolitan areas to the disposal site will generate emissions from the locomotives used to pull the railcars. The on-site vehicles will be the source of exhaust emissions, as well as fugitive dust from travel on unpaved roads. Fugitive dust will also be generated from the handling of cover materials. The landfill will be a source of fugitive vapors. Finally, the flaring of the landfill gas will also generate emissions.

As shown in Tables FEIR-AQ-7 and 8, included in Appendix M, Attachment 2 of the final EIS/EIR, the emission sources associated with both the Eagle Mountain project and the Rail-Cycle project are divided into off-site and on-site categories. For each emissions category, the emissions for the Rail-Cycle project are calculated by multiplying the corresponding emissions for the Eagle Mountain project by the ratio of the operating parameters for each project. The two major operating parameters used for the emissions calculations are the daily amount of waste transported to each project site and the corresponding rail haul distance to each project. This method of calculation assumes that the emissions from the urban transfer stations, unit train locomotives, landfill heavy equipment, landfill gas generation rates, and landfill gas disposal methods associated with the Rail-Cycle project are similar to those at Eagle Mountain, with the only difference being the relative activity levels for each project.

The ratio between the maximum daily waste streams for the Rail-Cycle project (21,000 tons per day) and the Eagle Mountain project (20,000 tons per day) is approximately 1.05. As shown in Tables FEIR-AQ-7 and 8, this value is used to calculate Rail-Cycle project emissions from the urban transfer stations, on-site vehicle exhaust, on-site fugitive dust, and landfill gas combustion. The ratio between the maximum amount of waste transported by rail each day to the Rail-Cycle project (21,000 tons per day) and the Eagle Mountain project (16,000 tons per day) is approximately 1.31. In addition, the ratio between the one-way rail haul distance to the Rail-Cycle project (220 miles) and the

Eagle Mountain project (204 miles) is 1.08. As shown in Tables FEIR-AQ-7 and 8, these two values are used to calculate train emissions. The rail haul distance for each project was measured from the Southern Pacific's Los Angeles Transportation Center (SPLATC) to each of the proposed landfills. The SPLATC was selected as the end point of both rail routes because it is located approximately in the center of the Los Angeles/Orange County rail network. Finally, the ratio between the maximum amount of waste transport by on-highway truck each day to the Rail-Cycle and the Eagle Mountain project is zero, because the Rail-Cycle project intends to transport waste only by train.

As shown in Tables FEIR-AQ-7 and 8 (Appendix M, Attachment 2 of the final EIS/EIR), the estimated emissions from the Rail-Cycle project are higher than the emissions from the Eagle Mountain project. This is due to the slightly higher maximum waste stream and longer rail-hauling distance to the Rail-Cycle project. Because the emissions associated with the Rail-Cycle project are of the same order of magnitude as for the Eagle Mountain project, the air quality impacts in the immediate vicinity around the Rail-Cycle project would be similar to those estimated for the Eagle Mountain project. Except for the impacts within the South Coast Air Basin from transfer stations and rail hauling, there would be no overlap in air quality impacts from the two projects, because of the relative distance and different terrain between the two landfill sites. As discussed in Response 0093-3, due to the lack of an adequate modeling tool, it is not possible to quantify interbasin ozone transport from the two projects.

6. As discussed in Response 0093-2, all of the emissions from the equipment associated with the project are discussed in the draft EIS/EIR (Appendix E, pp. 72-91). In addition, mitigation measures are discussed in Appendix E, pp. 105-131, of the draft EIS/EIR. Please see Response 0093-3 for a discussion of interbasin transport.

DOCUMENT 0094 Letter from Ruth and Robert Anderson, September 10, 1991

1. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0095 Letter from U.S. Department of the Interior, Fish and Wildlife Service, September 23, 1991

1. Please see Responses 0017-19, 0021-19, and 0021-24.

2a. Quantification of the number of tortoise burrows to be impacted by road or rail line construction and/or maintenance cannot be precisely determined at this time because the location of burrows and other signs will undoubtedly change from the 1989 surveys to the actual impact time at construction. Therefore, a clearance survey will be conducted just prior to any construction activity.

2b. To mitigate potential increases in raven populations due to landfill operations, a raven monitoring program will be established which will include a minimum of two years of preconstruction monitoring. Monitoring shall conform to methodologies outlined by the BLM and USFWS, and shall be conducted in concert with other raven monitoring programs (e.g., Joshua Tree National Monument) in the CDCA. Monitoring of ravens will continue throughout the life of the landfill project, or until the agencies determine that it is no longer necessary.

Exposed trash at the landfill site, which could attract ravens, will be minimized by daily burial of all deposited trash. A minimum six-inch covering of dirt/mine tailings will be placed over deposited trash at the end of each working day. In most cases, refuse will be buried within 30 minutes of deposit, further reducing exposure time. The active portion of the landfill will be fenced to aid in controlling windblown trash. This fencing should reduce the ability of other wildlife species such as coyote and fox to utilize the refuse in the landfill. These species could potentially dig out and expose buried trash, thus giving ravens access to the trash as well. However, fencing should minimize this potential impact. A coordinated hazing program shall also be established to discourage raven use of the landfill during times when trash is exposed.

It is also recommended that the non-toxic taste aversion bird repellent (methyl anthranilate) be applied to landfill refuse to repel the ravens. This has been used successfully elsewhere on turf and animal feed. It has not been used at a landfill, but researchers believe it could be highly effective (John Cummings, Denver Wildlife Research Center, Department of Agriculture, pers. comm., 1992).

Should monitoring indicate that the raven population is significantly increasing, and potentially threatening tortoise populations, then an active raven control program will be implemented immediately, and include one or more of the following control measures: nest destruction, poisoning, shooting, alteration of landfill operations, or any other measures that the responsible agencies deem appropriate. All necessary depredation permits, plus a comprehensive raven management/control program, will be in place before landfill operations begin. It is recommended that a Raven Monitoring Working Group be established at the time preconstruction raven monitoring begins. This working group should consist of representatives of the BLM, USFWS, CDFG, MRC, and any other agency representative or individual that the federal and state agencies believe appropriate. This working group would oversee the raven monitoring and control program, evaluate monitoring data, and make decisions on the timing and implementation of the raven control program. If the raven population in the vicinity of the landfill site increases significantly but due to political and legal constraints an active raven control program cannot be implemented, then impacts to the desert tortoise would be considered significant and unmitigated. However, at this time, given the proposed tortoise mitigation, tortoise impacts appear mitigable to nonsignificance.

It is strongly recommended that the nearby Desert Center landfill be closed, if feasible. This county-operated refuse dump is currently used by ravens, and its closure would remove one local source of food for this species. It is also recommended that if this dump site is closed it be done during the winter months when tortoises are not available as an alternative food source for ravens and other scavengers.

3. See Response 0027-22.

4. As suggested in this comment, this response reflects that the surveys conducted by the CDFG are standard management practice for desert pupfish. The CDFG monitoring program for desert pupfish will not be included in the mitigation measures. See Response 0034-20.

5. See Response 0034-19.

6. Most of the initial transplant areas have only minor disturbances and could be easily restored, while some of the sites are less disturbed and need little or no further enhancement. All Alverson's foxtail cactus remaining within the impact areas after the initial transplant experiment will be salvaged and moved to the selected mitigation site. Although the attempt will be to recover all the individuals, it is possible that some could be missed. However, it is anticipated that the vast majority of the population will be salvaged.

7. Although no significant impacts to adjacent wetlands or to major plant species in the washes are anticipated to occur from this project, where unavoidable, any such impacts will be minimized by flagging the construction corridor to prohibit the removal of trees outside of the construction corridor. Since the disturbance to plant species in the washes due to widening of the existing road would be very low, if at all, impacts are considered not significant, and thus, mitigation is not required. Therefore, the project does not include restoration for these species.

8. Drainage runoff from active landfill and operational areas will not be directly mixed with drainage from natural areas. Wash water and surface runoff which has come in contact with refuse will be directed to detention facilities, tested, and treated prior to release for dust control in accordance with current state and federal regulations. Waste oil in runoff will be separated and/or treated by pre-engineered treatment facilities immediately adjacent to the detention areas. In accordance with National Pollutant Discharge Elimination System standards, all potentially hazardous discharges will be tested and monitored. Runoff from the Kaiser townsite is a separate consideration and not directly connected with the landfill project. It should be noted that leachate and condensate generated at the landfill will be collected and temporarily stored on-site and properly disposed of at an approved off-site disposal facility.

9. The drainage plan calls for several intermediate on-site detention/settlement facilities which will reduce the volume and velocities of drainage flows. Design will include the use of riprap and concrete cut-off walls. Approval of these drainage plans is dependent on the condition that drainage outlet facilities will be sized to minimize velocities and reduce potential erosion. No other measures are deemed necessary to protect desert washes and their vegetation from erosion. For an updated discussion of the drainage plans for the proposed project, see Responses 0001-111, 112, 113, 114, 115, and 116 above. The drainage report is contained in Appendix L of the final EIS/EIR.

DOCUMENT 0096 Letter from LASER, September 19, 1991

1. The measures proposed for the project would protect the area's groundwater resources from any degradation. Please see Response 0001-25.

   Protection of the open portions of the Colorado River Aqueduct (CRA) is discussed below. The open portion of the aqueduct is roughly 1,000 feet from the Phase II handling facility. The waste screening/inspection facility at the Phase II container handling yard is discussed on pages 39-40 of the draft EIS/EIS. This area will process only locally generated waste and provide a location for random container load-checking. This amounts to no more than two to three tons of waste per day. All other waste would be compacted and compressed into the containers and delivered directly to the working face of the landfill in closed containers, thereby reducing the risk of windblown debris falling into the open portion of the aqueduct to below a level of significance. Dust control measures that would prevent any significant impacts to the aqueduct are presented in Responses 0003-29, 30, and 43. Please see Responses 0002-7, 13a, and 13b.

   While the proposed rail terminus would be located within 1,500 feet of an open section of the CRA, all the waste would be compacted and confined to a closed container prior to arriving at Eagle Mountain. The risk of contaminating the CRA from windblown debris is minimal.

   The waste container maintenance facility and recyclable material stockyard are separated from the CRA by an existing 40-foot berm. Recyclables will be stored in closed containers, thereby minimizing any risk of contaminating the CRA from windblown debris. In addition, the recyclable storage area will be inspected on a weekly basis to remove any windblown litter that may have accumulated. The container maintenance facility drainage system is designed to be self-contained so that all of the wash water will be properly treated and reused for additional washing and dust abatement. The CRA will not be impacted.

   No drainage from the proposed project will be directed toward the open Colorado River Aqueduct. Drainage outlets and other upstream facilities will be sized to minimize velocities and reduce erosion. Only surface runoff which has been diverted before coming in contact with refuse is planned to cross the covered portion of the aqueduct. MWD will be consulted as to design and location of these facilities. Copies of the drainage report and detailed plans have been forwarded to MWD for review. All drainage facilities for conveyance of flow over the aqueduct will be approved by MWD prior to construction.

See Response 001-28 and 29 for a discussion of landfilling in the lowest portions of the East Pit. The suggestion of this comment that the Reduced Project alternative be used will not significantly lessen the potential impacts to water quality identified in the draft EIS/EIR nor change the mitigation measures.

2. See Response 0096-1 above. Dust will be controlled at the site according to SCAQMD requirements as outlined in the draft EIS/EIR. Pages 515 and 516 describe the design features incorporated into the project design which would ensure that the impacts due to windblown debris and dust would be below a level of significance. No additional mitigation is needed.

3. The draft EIS/EIR discusses wind erosion of disturbed areas and applicable mitigation measures and concludes that particulate emissions from wind erosion are expected to be negligible (see Appendix E, pp. 85-90 and 123-124).

4. For on-highway vehicles, California's low-emission vehicle regulations and the corresponding requirements of the SCAQMD (Rule 1601) achieve the objectives of what are popularly referred to as "alternative fuels": methanol, natural gas, or liquefied petroleum gas (LPG). While alternative fuels may be used to comply with these regulations, they are not essential and provide no air quality benefits when compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low-emission vehicle programs are discussed in the draft EIS/EIR (see Appendix E, pp. 107-108).

   For landfill equipment, the use of alternative fuels as well as of electricity is discussed on pages 120-121 of Appendix E. As one of the recommended mitigation measures, electric versions of landfill equipment including overhead cranes, crushers, conveyors, and pugmills will be used wherever available. Where not available, alternative-fuel technology will be used depending on air permitting standards. See Mitigation Measure AQ-16 in the Air Quality portion of Section II.C. in the final EIS/EIR.

5. Project compliance with the SCAQMD New Source Review (NSR, Rule XIII) requirements is discussed in the Draft EIS/EIR (see Appendix E, pp. 102-105). By being designated as an "essential public service," the project is not exempt from any requirements under the SCAQMD NSR regulations.

6. Any translocation of tortoises or foxtail cacti would be carried out by qualified biologists approved by the USFWS and BLM (draft EIS/EIR, p. 450). A USFWS permit is required to handle the desert tortoise, because of its threatened status. Therefore, USFWS will have significant input into the biologist selection process. Translocations of both plants and animals will be conducted at the optimum times of year to increase chances of success (draft EIS/EIR, p. 456).

7. Translocated tortoises may be placed in either artificial burrows or in unoccupied burrows in adjacent habitat (Appendix F, pages 85-86).

8. A comprehensive worker/driver education program is proposed to sensitize local employees to the sensitive plants and animals in the area and to outline their responsibilities when these species are encountered (draft EIS/EIR, page 451).

9. Most of the BLM lands to be transferred to Kaiser Steel Resources at the Eagle Mountain Mine site have been heavily disturbed. Virtually all of the Kaiser property being transferred to the BLM is relatively undisturbed, except for the presence of the rail line. The land exchange is not considered mitigation for impacts to biological resources. This comment is incorrect in that it states that no other compensation is offered for project impacts. The BLM will select 375 acres of high-quality desert tortoise habitat, at a location of its choosing, as compensation for impacts to tortoise habitat from upgrading and extending Eagle Mountain Road. MRC will fund the purchase of this 375 acres (draft EIS/EIR, page 450).

   A portion (894 acres) of the BLM land at Eagle Mountain Mine to be exchanged will be directly impacted by the landfill. However, 744 acres of natural habitat will be preserved (draft EIS/EIR, page 447) as natural open space. No hunting of bighorn sheep will be permitted.

10. This comment does not question the adequacy or accuracy of the draft EIS/EIR but is welcomed for the suggestion of the makeup of a panel for evaluating the mitigation monitoring program. As required by the Local Enforcement Agency for the Eagle Mountain project (the Riverside County Department of Health), a mitigation monitoring plan must be established prior to the initiation of operations at Eagle Mountain. A Mitigation Reporting/Monitoring Program has already been prepared for the proposed project and is included as Appendix K of the draft EIS/EIR and has been updated in the final EIS/EIR (see Section II.C.). This program would be enforced by the LEA, as well as the RWQCB and the SCAQMD, to ensure its compliance as mandated by AB 3180. The inclusion of various citizens' groups on this panel will be suggested to the LEA.

11. No significant impacts to the elementary school were identified in the draft EIS/EIR, and therefore, no further action is required. As stated in the draft EIS/EIR (page 537), the

schools at Eagle Mountain are substantially underutilized. Both the elementary school and middle school buildings are not being used, and the high school has 93 students attending grades K-8. Based on the relatively incremental population increases resulting from this project (see pages 471-474), an additional high school site is not considered necessary.

12. Pages 49 and 331 of the draft EIS/EIR identify materials which would not be accepted at the site, including biological or infectious waste. The process to remove these and other unacceptable materials is outlined on pages 39, 49, 331, and 332 of the draft EIS/EIR. Also, see Responses 0001-117 and 0021-15 for a more detailed discussion on radioactive wastes.

13. The mandatory recycling goals of AB 939 and other local recycling efforts are outlined on pages 4 and 106 of the draft EIS/EIR. Also, please refer to Response 0015-2.

14. The process to remove recyclables from the waste stream prior to landfilling at Eagle Mountain is described in Response 0026-4. MRC will only indirectly enforce compliance with MRF operators for the removal of recyclables (and hazardous waste) through the mechanism of not accepting residual wastes unless the recyclables and hazardous materials have been removed. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with authority of the LEA.

DOCUMENT 0097 Letter from Natural Resources Defense Council, September 19, 1991

1. It is believed that all "reasonably foreseeable impacts" from reactivating the rail line and widening and extension of Eagle Mountain Road were considered. Direct impacts were quantified (e.g., amount of habitat lost to road widening); however, indirect impacts (e.g., number of tortoises hit by trucks) cannot be quantified at this time. These indirect impacts are discussed at length in the draft EIS/EIR (Section IV.G.), as well as mitigation measures to reduce these potential impacts. Also refer to Response 0097-29 below.

2. Mitigation measures are amplified in the Biological Assessment prepared for the Section 7 consultation required by the Endangered Species Act (Appendix N of the final EIS/EIR). A phased mitigation program, tied closely to a monitoring program, is proposed for many of the species requiring mitigation. Monitoring will document the success of a particular mitigation program. Should data indicate that this program is unsuccessful, more elaborate measures will be instituted. Mitigation programs for the desert tortoise, for example, are still relatively new, and determining their long-term likelihood of success is extremely difficult. In addition, NEPA does not require that an EIS always contain a detailed explanation of specific mitigation measures or a fully developed mitigation plan.

3. The draft EIS/EIR (Section IV.H.) discusses impacts of the proposed project on nearby communities, including the issues of growth inducement, socioeconomics, and utilities and services. The increased population, employment, and income resulting from the operation of the proposed facilities would be considered a socioeconomic benefit to the surrounding communities, and the long-term operation of the landfill would lend stability to communities and sustain community services. Cumulative and secondary impacts to all issues addressed in the draft EIS/EIR, including growth-inducing and socioeconomic effects, utilities and services, and biology, are addressed on pages 593-597 of the draft EIS/EIR. Also refer to Response 0097-36 below.

4. It is not believed that the habitats surrounding the proposed Eagle Mountain landfill site are "too fragile" to permit such use, given proper mitigation measures. The entire site, including the rail line, was in constant operation for many years when the mine was active. Obviously, these operations did not preclude the coexistence of sensitive wildlife and plant species in the area, and that was without significant mitigation measures to reduce impacts.

5. The ACECs bisected by the Eagle Mountain rail line were established while the Eagle Mountain rail line was still active (CDCA Plan, pages 123-128 [1980]). The maximum number of train trips per day along this line for the proposed landfill would not exceed those occurring when the Eagle Mountain Mine was active (draft EIS/EIR, page 152). Given the mitigation measures outlined in the draft EIS/EIR (Section IV.G.), no significant impacts from reactivating the rail line are expected.

6. Please refer to Response 0026-78 for impacts to recreation, 0059-6 for noise impacts, 0001-83 for air quality impacts, and 0097-7 for impacts to wildlife for a discussion of project operations on Joshua Tree National Monument.

7. The only impacts to wildlife in Joshua Tree National Monument involve a possible increase in the raven population at the landfill site. If there is a significant increase in raven population, this could impact tortoises as well as other potential prey species in the monument. Both passive and active raven control programs will mitigate this potential impact to nonsignificance (see pages 450-451 of the draft EIS/EIR).

8. All potentially significant impacts to natural resources from project implementation were considered. The BLM, USFWS, and CDFG have not recommended studies in addition to those proposed in the draft EIS/EIR. The proposed studies will be completed either prior to project commencement or as ongoing mitigation monitoring during project start-up and operation to assess the level of mitigation measures. The effectiveness of certain mitigation measures cannot be determined before the project construction and operation have begun.

9. No significant impacts are anticipated to the Yuma clapper rail from project implementation (see Response 0097-38 below). Impacts to the desert pupfish could be significant, but will be reduced below a level of significance by mitigation measures (draft EIS/EIR, pages 458-459). Impacts to the desert tortoise would be significant but will be reduced to a level below significance with the implementation of the mitigation measures recommended in the draft EIS/EIR (pages 449-451). Since no significant impacts are anticipated, conservation of the desert tortoise is not threatened. Conservation of the tortoise will be furthered when a habitat conservation plan is developed for the western Mojave Desert tortoise population. The BLM is currently working on that HCP. The BLM is also working with the USFWS and CDFG in requiring appropriate mitigation measures for all projects in California deserts which have the potential to impact desert tortoises. The Endangered Species Act affords no legal protection to candidate species until they are listed, or proposed to be listed, under the act. The BLM does give sensitive species special treatment, but does not treat those species as listed for planning purposes (CDCA Plan 1980:30).

10. Mitigation measures for all federal candidate species that would experience significant impacts are proposed in the draft EIS/EIR (page 462). It is believed that these measures will reduce impacts to below a level of significance. Such candidate species are not protected under the ESA.

11. As discussed in Section IV.G.2 of the draft EIS/EIR, project implementation would cause significant impacts to Nelson's bighorn sheep by eliminating four artificial water sources. However, these impacts would be mitigated through the telemetry monitoring program, and creation of four new permanent water sources located in less disturbed habitat (draft EIS/EIR, pages 454-4576; Appendix F, pages 84-85).

12. The proposed project does have the potential to significantly impact the desert tortoise through various human disturbances. These have been discussed in detail in the draft EIS/EIR (pages 446-449). Most human-related impacts would be associated with the landfill site and the town of Eagle Mountain. Natural habitat in the immediate vicinity of these locations is of poor quality for the desert tortoise, and very little tortoise sign has been found in these areas.

13. The potential impacts listed in this comment have been discussed in the draft EIS/EIR (Section IV.G.1; pages 446-449, 585, and 593).

14. This response acknowledges that there is some potential for ravens to be attracted to the Eagle Mountain townsite. Impacts from the townsite were discussed in the cumulative impacts section of the draft EIR/EIS (page 593) and will also be dealt with in the EIR planned for the townsite. An extensive effort will be made by the landfill operators to control windblown trash by fencing the active portion of the landfill to catch trash (see

pages 515 and 516 of the draft EIS/EIR and Response 0026-9). Also, a response plan to deal with accidental refuse spills will be prepared and the proper equipment necessary for cleanup will be in place (draft EIS/EIR, pp. 514-516). Finally, the raven control plan discussed on pp. 450-451 will address this impact.

15. As identified on page 235 of the draft EIS/EIR, several old tortoise signs were found along the railroad right-of-way near the townsite. However, the surrounding habitat was very poor tortoise habitat, with very rocky soils and extensive areas of desert pavement. On October 8 and 9, 1991, RECON conducted additional tortoise surveys in the areas near the townsite and adjacent to Eagle Mountain Road for the road realignment. No additional evidence of tortoise activity was found near the town. In addition, this issue was discussed in the cumulative impact section on page 593.

16. Adequate data do not exist on the distance ravens will travel to forage, thus evaluation of this impact is speculative at this point in time. The Chuckwalla Bench ACEC is 15-20 miles south of the landfill site. BLM plans on conducting field research during the coming year (1992) to study this issue.

17. The mitigation measures to reduce raven populations are believed to be adequate (page 450-451 of the draft EIS/EIR). There are a number of unknowns as to how ravens will respond to the presence of the proposed landfill. Therefore, a monitoring and phased mitigation program has been proposed (see Section II.C. of the final EIS/EIR). Therefore, mitigation programs are still being designed and tested to adequately mitigate impacts to this species. The mitigation programs associated with the landfill will be useful in testing alternative mitigations and determining which are most effective. The proposed active raven control program has been demonstrated to be effective in significantly reducing raven populations. Although the BLM's test control program (1989) was prematurely halted, it did show that raven populations could be significantly reduced through a poisoning program. The commenter is correct, however, in that if the active control program, which is a final measure, cannot be implemented (if it is needed) due to legal constraints, impacts to the desert tortoise might be significant. It is hoped that a raven control program acceptable to the USFWS, BLM, CDFG, Raven Technical Review Team, and the U.S. Humane Society can be agreed upon in the near future. It is not likely that any active raven control would be needed for several years, if at all. It is within the power of the USFWS to halt a project that is engaged in unauthorized "take" of an endangered or threatened species.

    As noted on page 451 of the Draft EIR/EIS, all raven control programs will be undertaken in conjunction with the Raven Management Plan for the California Desert Conservation Area (BLM 1990). Additional information which amplifies the effectiveness of the raven control measures can be found in the Draft Raven Management Plan (pages 29-34 and page 46) and in the related Draft Environmental Impact Statement for the management of the common raven (BLM April 1990, at pp. 7-17). Copies of these documents are available at the BLM's Desert District office, 6221 Box Springs Boulevard, Riverside, California.

18. The most effective method for controlling ravens would occur at the landfill site where the ravens would be most concentrated and thus most readily exposed to control agents.

19. With the implementation of the proposed Mitigation Reporting/Monitoring Program (see Appendix K of the draft EIS/EIR and Section II.C. of the final EIS/EIR), it is not believed that reactivation of the railroad will increase pressure on the local tortoise population.

20. Additional quantitative tortoise surveys were conducted in the vicinity of the rail line, but outside of the right-of-way, by RECON on October 8 and 9, 1991, to amplify existing data (see Biological Assessment, Appendix N of the final EIS/EIR). Even if an accurate tortoise population density were known, the number of tortoises that might be killed by train collision could not be estimated accurately. One new mitigation measure is to have a biologist precede each train and remove any tortoises found on the tracks and place them in appropriate habitat immediately adjacent to the rail line. Ballast (i.e., regravel) would also be placed between the tracks periodically to allow tortoises trapped between rails to escape. By monitoring the areas where tortoises are most active in crossing the rail line, the locations where a barrier culvert would be necessary can be identified.

21. The draft EIS/EIR recognizes that reactivation of the railroad could exacerbate the existing habitat fragmentation. A barrier-culvert system along the railroad to eliminate tortoise mortality, especially where the railroad crosses a relatively narrow peninsula of higher density tortoise populations in the Chuckwalla Bench ACEC, could potentially further fragment existing populations of the tortoise. It is believed that the culverts would provide enough interchange of individual tortoises to maintain genetic flow and population viability. Very few tortoises have to cross the rail line in any given year to maintain genetic flow.

    The only way to avoid crossing the high density tortoise habitat in the Chuckwalla Bench would be to consider other rail routes or the elimination of rail haul entirely. Such alternatives present other environmental problems. Three alternatives would be to relocate the railroad to cross the Orocopia Mountains, to construct a new rail line from the Southern Pacific main line in Indio along the I-10 corridor to the existing Kaiser Railroad, or to eliminate the rail haul element of the proposed project entirely. First, the Orocopia Mountains represent relatively undisturbed bighorn sheep habitat important to metapopulation movement corridors. Second, the I-10 corridor passes through lower density tortoise habitat; however, the required distance of disturbance for a new rail spur would be twice as long as for the existing rail line. And finally, eliminating rail traffic entirely would require the increase of truck traffic from 100 trucks per day to 1,000 trucks per day. The increased truck traffic would increase emissions of fine particulate matter (PM10) which would be counter to specific efforts within the Coachella Valley to reduce PM10. In addition, all of the alternatives would require new disturbance as compared to the existing rail line.

22. Research conducted by Margaret Fusari (1982, Feasibility of a Highway Crossing System for Desert Tortoises, Final Report No. FHWA/CA/TP-81/1, submitted to the U.S. Department of Transportation) indicated that tortoises will use culverts. This report can be reviewed at Division of Transportation Planning, California Department of Transportation, Sacramento, CA 95814.

23. Noise measurements were taken 50 feet from the rail line (Appendix F, page 75) and at a height of 4 to 6 feet above the ground. No ground measurements were taken. A detailed discussion of noise impacts to the tortoise is found in Appendix F, pp. 74-78 of the draft EIS/EIR.

24. Data presented in Appendix F, pages 77-78 of the draft EIS/EIR, show that the number of deteriorated or collapsed tortoise burrows within the berm of an active rail line did not differ significantly from the number found a quarter mile away, where there is no impact from vibration. None of the collapsed burrows along the rail berm showed any signs of recent tortoise activity. The data strongly suggest that the collapse of occupied burrows due to ground vibration is not occurring frequently, if at all.

25. See Appendix F, pages 74-78, for a discussion of impacts of noise and vibration on the tortoise. Circumstantial evidence would support the idea that train noise and vibration are not causing significant impacts to the desert tortoise. The locations where data were collected on train-tortoise interactions have had heavy rail use for many years, yet tortoises are still making use of the rail berms. One would expect that if the effects of train noise were detrimental to the tortoise, it would reveal itself in a decrease in tortoise activity along the rail line. In actuality, the reverse situation has occurred. Rail berms apparently attract the desert tortoise, probably due to good burrowing conditions.

26. As stated in the draft EIS/EIR (page 452), the Rail Access Only alternative would reduce the direct loss of 150 acres of tortoise habitat because the expansion of Eagle Mountain Road would not be necessary.

27. This comment is in error. On pages 448 and 449 the draft EIS/EIR states, "Such road kills are likely to reduce tortoise densities for a distance of one-quarter to one-half mile on both sides of the road, unless effective barriers are placed along the road in all areas where tortoises occur." The 150 acres referred to in the draft EIS/EIR represents direct impacts (i.e., loss of habitat).

28. All of the potential impacts listed in this comment are discussed in the draft EIS/EIR (page 449 and Appendix F, pp. 80-81). Mitigation for these impacts include a fencing and culvert system along Eagle Mountain Road, raven monitoring and control, truck speed limit, driver tortoise education, and the regular sweeping of the road for any road kills. Recent changes in the proposed project will reduce truck traffic from 200 to 100 round trips per day. This scenario would reduce potential long-term impacts to the tortoise. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

29. While there is evidence to support the effects of the roadway on reducing tortoise densities one-quarter to one-half mile from the right-of-way, and this was discussed in the draft EIS/EIR, pages 448-449, there is no evidence that a similar effect would be associated with an active rail line. In fact, data presented in the draft EIS/EIR, page 449 and Appendix F, page 77, suggest the opposite.

30. The proposed Mitigation Reporting/Monitoring Program (Section II.C. of the draft EIS/EIR) will examine the effectiveness of each mitigation program and modifications to improve effectiveness will be made where necessary. The USFWS, BLM, and CDFG will be heavily involved in analyzing the monitoring data and in recommending required changes. Mitigation measures have been proposed because it is believed that their probability of success is high. The effectiveness of the Raven Control Program is discussed in more detail in Response 0097-17 above. The other measures proposed to mitigate tortoise impacts are similar or identical to numerous other projects approved in the Mojave Desert to mitigate tortoise impacts. In addition, neither CEQA nor NEPA require an EIS/EIR's mitigation measures to include the level of detail requested by the commenter. The updated Mitigation Reporting/Monitoring Program is located in Section II.C. of the final EIS/EIR.

31. Eagle Mountain Road will be a private road, primarily restricted to truck traffic. However, as now proposed, the road will not be gated, but only posted as a private road. The area adjacent to Eagle Mountain Road has already been disturbed with off-road traffic, although much of it may be the result of military training in the 1940s. Most access to the town of Eagle Mountain is by way of Kaiser Road. The southern portion of the Eagle Mountain Road already exists and a portion of the northern part exists as a dirt access road (Draft EIS/EIR, page 25). Thus, the additional access concern only applies to the most northern portion of the Eagle Mountain Road.

32. This comment is confusing the "offered lands" with the 375 acres proposed for mitigation. The 375 acres of tortoise habitat to be purchased by MRC (page 450 of the draft EIS/EIR) as compensation for loss of habitat through construction of Eagle Mountain Road and rail spur, is in addition to the offered lands discussed in the draft EIS/EIR (page 15). While the BLM would choose the offered lands along the Eagle Mountain rail line in

part for their natural resource values, they would represent a part of a real estate exchange between Kaiser Steel and BLM. Kaiser would receive BLM lands adjacent to the landfill site in exchange for the offered lands. The offered lands are not considered part of any mitigation plan. The 375-acre tortoise mitigation parcel(s) have not yet been selected by the BLM for purchase by MRC.

33. The land referred to in this comment (shown on Draft EIS/EIR, Figures 5-10) is the offered lands to be transferred to BLM ownership (see page 15 of the draft EIS/EIR). These lands are different from the lands involved in the mitigation plan. See Response 0097-32 above. The lands to be selected by the BLM for habitat compensation will be selected to maximize benefits to the tortoise population.

34. As stated on page 450 of the draft EIS/EIR, the 375 acres of desert tortoise habitat to be purchased for compensation will be selected by the BLM for their high value for tortoise preservation.

35. It appears that this comment is confusing the offered lands with the 375 acres of tortoise habitat to be purchased by MRC as compensation for the loss of habitat due to road and railroad improvements. See Response 0097-32 above for clarification. BLM will manage these tortoise lands for the benefit of the tortoise as it is required to do under the federal Endangered Species Act and the CDCA Plan (1980) at pp. 30-36. Any BLM decisions concerning multiple use will be made, in desert tortoise habitat areas, with the desert tortoise protection requirements in mind.

36. While an increase in human activity would be anticipated at the Eagle Mountain townsite, most activity would likely occur in nearby habitat where there are no tortoises or where tortoise densities are low. The Chuckwalla Bench is 15 to 20 miles south of the townsite and is not likely to receive a significant increase in human activity, as a result of this project.

37. The potential impact to desert pupfish during construction or maintenance activities of the railroad are noted on page 79 of Appendix F of the draft EIS/EIR. Measures to avoid these impacts have been developed and include the review of construction and maintenance plans by a qualified biologist, sensitive placement of storage and staging areas, restricting construction activities during the fall, and the retention of an on-site qualified biologist to monitor construction activities. These measures are contained in the Mitigation Reporting/Monitoring Program (Section II.C. of the final EIS/EIR). NEPA and CEQA do not require that a complete mitigation plan be actually formulated and included in the draft EIR/EIS. The biological assessment forwarded to the USFWS and attached to the final EIS/EIR elaborates the discussion of desert pupfish mitigation found on pages 458-459 of the draft EIS/EIR.

38. While the Yuma clapper rail has been documented to occur within one mile of the train trestle, its known locations are upstream from the trestle. Any water contamination from maintenance work or a rail accident would flow downstream and away from rail habitat. The locations of these birds relative to the trestle, based upon surveys in 1977 and 1988, suggest that they are fairly constant. The 1977 survey would have occurred when the rail line was being actively used by Kaiser Steel (draft EIS/EIR, page 152).

39. It is estimated that the adit would need to be extended by approximately 250 feet. Considering that the bat's winter roost is 1300 meters into the mine shaft, a 250-foot adit extension is not likely to significantly alter the temperature and humidity at the roost site. Until listed, or formally proposed for listing, candidate species receive no protection under the federal Endangered Species Act. Therefore, the draft EIR/EIS was not required to discuss candidate species such as the California leaf-nosed bat in an ESA review, rather, it was only required to discuss the bat for purposes of the project's wildlife impacts under NEPA and CEQA. The bat was discussed in the draft EIR/EIS as required by those two statutes.

40. While the container handling facilities may be active at night, the disposal of refuse in the landfill will only be conducted during daylight hours (draft EIS/EIR, pages 51 and 462). The adit is not located in the immediate vicinity of the handling facilities, rail line, or Eagle Mountain Road (one to three miles). With a winter roost 1300 meters inside the mine shaft, it would seem unlikely that daytime noise or vibration would pose a significant disturbance. The bat population will be monitored as long as they occupy the adit. It is estimated that it will take 35 years before landfill operations require the placement of an adit extension.

41. See Response 0097-40. As an additional mitigation measure the adit will be gated so that unauthorized human entrance is barred, but the gate will be constructed so that bats are unrestricted in their movements.

42. It may be necessary to use different material than concrete piping to ensure the structural integrity of the adit extension. Design and materials used will be selected based upon their adequacy to withstand landfill conditions. Dr. Brown recommends that the adit be extended to prevent the landfill from covering the adit (second survey, draft EIS/EIR, Appendix F, Attachment 1, page 4). This adit extension proposal was adopted as the proposed mitigation measure (draft EIS/EIR, page 462).

43. Dr. Brown's second survey is included in Appendix F of the draft EIS/EIR, Attachment 1.

44. Townsend's big-eared bat was not found on-site during the spring or winter bat surveys. While evidence of an old maternity roost was found in the adit, no recent evidence exists that this bat continues to use the property. It may use one or more of the abandoned mine

shafts that surround the Eagle Mountain Mine property. Bats will continue to be monitored during project development.

45. The original statement in the draft EIS/EIR was based upon a misquote from Dr. Brown's 1980 report. This response acknowledges that the sentence stating that there are no known maternity roosts should be deleted.

46. Dr. Brown's December 1990 bat survey did make an effort to search for Townsend's big-eared bat, but found no additional evidence that this species was using the Eagle Mountain Mine property (Appendix F of the draft EIS/EIR, Attachment 1).

47. It is beyond the scope of this project to assess the entire off-site populations of Alverson's foxtail cactus; therefore, the report must rely on existing information on the distribution of the species. Of the 13 sites documented in the California Natural Diversity Data Base, only two sites occur on private lands while the rest occur on federal lands. This offers at least some reassurance that the majority of the distribution of this species in California has some protection from land development. The population at the Eagle Mountains will not be completely lost, an attempt will be made to salvage individual cacti in the impact areas and a reestablishment program will be implemented; the loss is, therefore, not expected to adversely affect the continued existence of the species (draft EIS/EIR, pages 464-466). In addition, Category 2 candidate species are not protected under the U.S. Endangered Species Act. The review necessary under NEPA and CEQA has occurred as discussed above. The in-depth analysis of all individuals of the subject population will occur as part of an Endangered Species Act proposed listing evaluation, by the USFWS, if and when the USFWS proposes to list this species.

48. Page 38 of Appendix F states that only a few individuals of foxtail cactus were found along the railway and that no significant concentrations of this cacti were observed within the survey corridor. The 158.3 impacted acres shown in the impact table of the report (page 447) refers to the sum of 125 acres at Eagle Creek Wash, 7.6 acres in Planning Area 4, and 25.7 acres due to the construction of the rail spur, road extension, and improvements to Eagle Mountain Road outside of Planning Area 4 (draft EIS/EIR, page 464).

49. The 157-acre site east of the townsite (Planning Area 6e) was chosen because it currently supports a major population of foxtail cactus. Additional cactus populations will be preserved in other portions of Planning Area 6. Five areas, including the site west of the townsite, were chosen as test sites for transplantation because of existing populations of foxtail cactus, suitable soils, and drainage. These areas are listed on page 465 of the draft EIS/EIR. After the trial period is complete, the location(s) having the greatest survivorship will become the site(s) for the completion of the transplantation program. Please refer to Response 0034-4.

50. It is true that transplantation programs are used only when other mitigation measures are not available. After many discussions with various biologists at BLM and other agencies, it was decided that transplanting the cactus was the only reasonable option in this case. The absence of a species from adjacent areas within its range does not necessarily mean it cannot grow there, but may be related to many other factors such as poor dispersal mechanisms. The percentage of cactus to be used in the trials was stated on page 465 of the draft EIS/EIR.

51. Once planted it should not take more than two years to assess survivorship of the transplants. However, it is true that the long-term success of the restoration effort will take many years to assess.

DOCUMENT 0098 Letter from Joan M. Smith, September 22, 1991

1. The truck traffic using I-10 will be direct hauling for an average of 75 miles to the landfill site at Eagle Mountain. Only on a rare occasion would such a hauler be likely to stop at the truck stop at the intersection of Ramon Road and I-10, particularly at the same time.

2. Noise measurements were taken for land uses within 100 feet of the corridor of the Southern Pacific rail line, including the Coachella Valley. It was determined that the addition of the project-generated train traffic to the existing train traffic would slightly increase (+0.7 dB) noise levels along the rail corridor. This increase that would be experienced by residential areas 100 feet from the Southern Pacific rail line is not considered significant because it is not discernible by humans. It should be noted that existing noise levels within 100 feet of the rail line corridor are 74 CNEL, which exceeds acceptable noise levels for residential uses. Also, see Response 0001-103.

3. The risks associated with derailments and truck accidents are discussed on pages 351-352 of the draft EIS/EIR. For a condition of the Eagle Mountain rail line and the proposed improvements, please refer to Response 0017-6. MRC will arrange scheduling of refuse unit trains with Southern Pacific on a contractual basis to prevent any delays in scheduling and to prevent conflicts between ongoing rail operations and trains being utilized for the landfill project (pp. 50 and 357). For a discussion of risks and response procedures to rail and truck accidents, please refer to Responses 0017-9 and 0026-3. In the event of an accident or derailment, Southern Pacific will ultimately be responsible for any clean-up costs.

4. Ongoing recycling programs are discussed on pages 4 and 106 of the draft EIS/EIR. AB 939 is a mandatory recycling program requiring municipalities to reduce their waste 25 percent by 1995 and 50 percent by 2000. Obtaining these goals, however, would not eliminate the need for the proposed project. At this time there is no known technology for disposing of solid waste in the oceans in an environmentally safe manner. The

alternative rail routes suggested in this comment would have greater air quality and energy consumption impacts due to the greater distances involved. Thirty-five miles of new railroad track is considered infeasible.

DOCUMENT 0099 Letter from Joyce Jones, September 20, 1991

1. As discussed on pages 335-338 of the draft EIS/EIR, the problems associated with landfill gas migration and with the explosive potential of the gas would be effectively controlled by the installation of an LFG control system. As stipulated in Rule 1150.1 of the South Coast Air Quality Management District, the LFG control system must be approved by the SCAQMD Executive Officer, and it must be installed and operated in such a way as to prevent excessive concentrations of methane at any point on the surface of the landfill. The lower explosive limit (LEL) is 5 percent by volume. As stated in the Code of Federal Regulations, Title 40, Part 257.3-8, the concentration of methane gas at the property boundary cannot exceed the LEL. Furthermore, permanent subsurface LFG monitoring wells or detectors will be placed near structures in the vicinity of the landfill site. Design specifications and other details pertaining to the LFG monitoring system would be subject to approval by the County Department of Health as part of the solid waste facilities permit. For further discussion of this issue, please see Response 0001-46, 51, and 52.

2. See Responses 0001-45 and 46.

3. Landfilling operations in the East Pit would occur in sequences which would assure that the most potentially minable iron resources are impacted last, which would protect access to mineral resources for approximately 85 years (see Section IV.I.3 of the draft EIS/EIR). Since it is not economically feasible to recover mineral resources at the current time and since future market conditions are not predictable, it is not known at this time whether the prime mineral deposits in the East Pit will be mined. Prior to any mining operations, a CEQA document assessing the impacts of mining, including blasting activities, would have to be certified by Riverside County.

4. The commenter does not provide a basis for such a conclusion. Project compliance with federal and local air quality regulations is discussed in Appendix E, pp. 97-105. The air quality permits issued under the SCAQMD's New Source Review program will ensure that the project is in compliance with these federal and local air quality regulations.

5. Please see Responses 0001-8, 10 through 15, 25, 33, 35, and 36 and 0002-4 through 7, 13a, and 13b.

6. Please see Responses 0001-8, 10 through 15, 25, 33, 35, and 36 and 0002-4 through 7, 13a, and 13b.

7. Funding of the County of Riverside oversight requirements to ensure compliance with the provisions of the permits is to be negotiated with the Local Enforcement Agency, which for the Eagle Mountain project is the Riverside County Department of Health.

8. The project will have no direct impact on Joshua Tree National Monument with respect to its recreation values, uses, or opportunities for camping, hiking, backpacking, photography, wilderness use, or nature study. It is possible that the proposed landfill will attract ravens. Some of these could possibly impact the desert tortoise in Joshua Tree National Monument, as well as other potential prey species. A raven monitoring and control program is proposed to mitigate this potential impact (Appendix F, pages 70-71). See Section II.C. (Biology) of the final EIS/EIR for a list of the mitigation measures proposed to control ravens. Measures to control windblown debris associated with landfill operations are addressed in Section IV.J.4 of the draft EIS/EIR. See Response 0026-9.

9. The draft EIS/EIR (page 475-476) states that the proposed project would have a positive effect on the local economy. The increase in population to nearby communities would help sustain and likely increase the existing business income levels and commercial/business opportunities would be created. It is believed that the increased population would have a positive influence on real estate and property values in the surrounding areas.

10. The Proposed Action with Rail Access Only alternative is described on page 75 of the draft EIS/EIR. This alternative would eliminate all truck traffic, thereby eliminating any additional truck impacts to surface streets, including I-10. It should be noted that since the preparation of the draft EIS/EIR, the proposed project has been revised to reduce the number of truck trips from 200 to 100 round trips per day. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

11. A discussion of measures to reduce solid waste in the waste stream is provided on pages 105-107 of the draft EIS/EIR. Upon achievement of the mandatory recycling goals, however, the need for a large-scale or a number of smaller-scale landfill projects in the region would still be present. Therefore, waste diversion programs are considered but eliminated from detailed analysis as feasible alternatives to the proposed project in the draft EIS/EIR.

12. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

13. Energy consumption resulting from the project is discussed in Section IV.O. of the draft EIS/EIR. See also revised information on energy consumption included in Section VI of the final EIS/EIR (refer to information for pages 574, 579, and Tables 51 and 53). The overall energy consumption of this project was determined to be not wasteful, inefficient,

and unnecessary. Mitigation measures to reduce fuel consumption are identified on page 578 of the draft EIS/EIR.

DOCUMENT 0100 Letter from County of San Diego, September 16, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

2. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

3. This comment is correct. If in the future San Diego County intends to use the Eagle Mountain landfill, a separate environmental document would be required to identify potential impacts, including air quality effects on the San Diego Air Basin.

4. The need for future environmental review of transfer stations is identified in Response 0015-2.

DOCUMENT 0101 Letter from G. Fred Lee & Associates, September 10, 1991

1. This letter does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. Enclosed with this letter is a lengthy attachment of background information from the commenter consisting of articles, promotional materials, and biographical sketches. This material is available for review at the County of Riverside Planning Department in Riverside, California, and the BLM Resource Area Office in North Palm Springs, California.

DOCUMENT 0102 Public Hearing: Bermuda Dunes, September 18, 1991

This comment letter represents comments received at a public hearing in Bermuda Dunes on September 18, 1991. Representatives of the Riverside County Planning Commission were present at the hearing as well as the applicant, project engineers and representatives, an independent environmental consultant, and members of the general public. The purpose of this meeting was to answer Planning Commission questions on the proposed project by the project proponents and for the public to present their testimony directly to the Planning Commission.

The hearing started with Riverside County staff providing an overview of the proposed project, followed by the project applicant's presentation and slide show. Questions were presented by the Planning Commission and then the floor was opened up to the public for their comments.

The responses to comments made by the Planning Commission and members of the public are as follows.

1. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a layer of low-permeability soil and a high density polyethylene (HPDE) flexible membrane will be placed over the entire area underlying refuse. More specific details of the liner are provided in Response 0002-4 and Section II.B.1 of the final EIS/EIR.

2. The RWQCB requires that the final design stability analysis shows that the liner can withstand both static and dynamic loading from the weight of refuse and the peak ground acceleration expected at the site.

3. This comment reflects a misunderstanding of what "agreements" are being referred to. The California Department of Fish and Game is involved in 2081 permits and 1603 agreements, for state endangered species and streambed impacts, respectively. When and if the EIS/EIR is certified and development of the project occurs, these permits and agreements are likely to be required.

4a. The elementary school is approximately 7,000 feet from the Phase I container handling yard and 6,500 feet from the Phase II container handling yard.

4b. The correctional facility is about 1,500 feet from the Phase I container handling yard.

5. The requirements for getting a permit for the project in the South Coast Air Quality Management District involves taking the information that is in the draft EIS/EIR and putting it into the proper format and consulting with the district to discuss two key issues that they have to decide before they can issue the project's permit. The first issue is whether the project is using the best available control technology. The second is whether the project has provided adequate offsets for mitigation in the context of the district's regulations. This concept is similar to the mitigation requirements under CEQA.

6. The Development Agreement serves as a contract between the applicant and Riverside County to develop the project, the opportunity to invest certain permits to this process, and the opportunity to develop that process under today's rules. The Conditions of Approval and the Specific Plan itself will set the development controls on the project.

7. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

8. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

9. This comment acknowledges the economic benefits of the proposed project. The economic benefits of the project are described in Section IV.H. of the draft EIS/EIR. See also Response 0018-13.

10. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

11. The medical and pension benefits to Kaiser Steel Resources retirees resulting from the proposed project are acknowledged in the draft EIS/EIR (pp. 475-476). Since this comment does not address the adequacy or accuracy of the draft EIS/EIR, no additional response is required.

12. See Response 0026-26.

13. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

14. This comment provides supplemental information to the question regarding benefits to the retirees. Please refer to Response 0102-12 above. It does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

15. Please refer to Response 0015-2.

16. Solid waste transported from the MRFs would primarily use the Southern Pacific Railroad right-of-way. The MRF located in the Coachella Valley would use I-10 to Eagle Mountain Road. These transportation corridors are described in detail in Sections IV.C.1 and IV.C.3 of the draft EIS/EIR.

17. Seismic hazards in the vicinity of the proposed project are described in Section IV.I.2 of the draft EIS/EIR. The landfill will be designed to withstand the maximum probable earthquake without damage to the foundation, fill slopes, or structures which control leachate, gas collection, or surface drainage.

18. Please refer to Responses 0001-7 and 0026-82. Also, to correct some misinformation, Eagle Mountain will not be the largest landfill in the world.

19. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

20. All refuse destined for Eagle Mountain will be subjected to an inspection program for the removal of recyclables and hazardous materials at the transfer stations and MRFs. In addition, random inspections of the solid waste entering the landfill will be conducted

by the Local Enforcement Agency to ensure that the screening procedures for hazardous materials performed at the transfer stations are adequately executed. See Response 0002-8 for a discussion of the load-checking program.

21. The issue raised in the comment is not entirely clear. Page 351 of the draft EIS/EIR points out that the emphasis on rail transport would tend to decrease the overall potential for accidents when compared with conventional truck transport of the same amount of solid waste due to the control and maintenance of the rights-of-way in which trains operate. However, as explained in Response 0021-7, in the event of rail service interruption, truck transport would be temporarily utilized to handle the portion of the refuse normally carried by rail until rail service can be resumed. Sections IV.C.1 and 2 of the draft EIS/EIR discuss potential for accidents with respect to rail operations and at-grade crossings. The draft EIS/EIR (page 360) concludes that the project is not expected to have a significant impact on safety within the study area. Additionally, the scheduling of refuse unit trains with Southern Pacific on a contractual basis will prevent any conflicts between ongoing rail operations and trains being utilized for the landfill project (pp. 50 and 357).

22. The quotation in the comment refers to the potential long-term impact of the project on groundwater without mitigation. See Responses 0001-25, 28, and 29.

23a. See Responses 0003-31, 32, and 33.

23b. The relative impacts of the proposed project and of all alternatives, including the "No Project" alternative, are discussed in the draft EIS/EIR separately for the South Coast Air Basin and for the Southeast Desert Air Basin. Figure FEIR-AQ-3 in Attachment 2, Appendix M of the final EIS/EIR shows relative impacts of the proposed project with mitigation and of the "No Project" alternative for the Coachella Valley and the Eagle Mountain area. In addition, Figure FEIR-AQ-2 included in Attachment 2, Appendix M of the final EIS/EIR compares the estimated project emissions from rail and truck travel in the Coachella Valley with estimates of emissions from all sources in the Coachella Valley.

As shown on Figure FEIR-AQ-2, of Attachment 2 in Appendix M of the final EIS/EIR, the estimated impacts from the proposed project in the Coachella Valley will result in an increase above the estimated 1991 emissions baseline for the area. The emissions increases are of approximately 3.8 percent for NOx, approximately 0.5 percent for ROGs, and approximately 0.06 percent for PM10 emissions. There are no approved regional air quality models which can be used to perform the analysis requested. Regional photochemical models, such as those used to prepare regional air quality plans, are not suitable for this purpose, because they are insensitive to changes in emissions which are less than five percent of the regional total. The emissions changes associated with the

Eagle Mountain project are below this sensitivity threshold in both the South Coast Air Basin and in the Coachella Valley. The analysis in the draft EIS/EIR was performed using the best analytical tools available.

24. The impacts of the "Rail-Only" alternative are fully discussed in the Draft EIS/EIR (see Appendix E, pp. 174-189). This project alternative assumes that the project does not receive waste generated in the nearby area (approximately 4,000 tons/day) which would be directly transported to the project by truck. Therefore, for the "Rail-Only" alternative, the maximum amount of waste transported to the site would be 16,000 tons/day rather than 20,000 tons/day. Because the amount of waste transported by rail remains the same as for the proposed project, it is not necessary to increase the number of trains used to transport waste for the "Rail-Only" alternative.

    Subsequent to the preparation of the draft EIS/EIR, MRC has proposed to reduce truck traffic to the project site from 200 trucks per day to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). No additional trains other than the six identified in the draft EIS/EIR would be used to transport refuse to the landfill under a reduced truck alternative. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic. To clarify the number of trains serving the site, pages 356 and 357 of the draft EIS/EIR explains that under the proposed action, the container handling yard is capable of accepting up to six unit trains per day. However, an average of 4.7 train shipments per day will be required when the project is operating at full capacity. This number is arrived at by dividing the maximum tonnage acceptable by rail per day (16,000 tons) by the tonnage of refuse per train load (3,500 tons), which equals approximately 4.7 trains. Since the tonnage per train, but not the number of daily trains, would be increased due to the recent reduction in trucks, no additional environmental review is necessary other than air quality impacts (see Appendix M, Attachment 10).

25. The PM10 mitigation measures for the proposed project are discussed in Appendix E (pp. 105-131) of the draft EIS/EIR. Table FEIR-AQ-2 in Appendix M (Attachment 2) of the final EIS/EIR compares the mitigation measures recommended in the Coachella Valley PM10 Plan and those included in the draft EIS/EIR. The table also includes comments explaining why some mitigation measures are not deemed applicable to or not feasible for the Eagle Mountain project.

26. Compliance by the project with the SCAQMD's New Source Review requirements is discussed in the draft EIS/EIR (see Appendix E, pp. 102-105). The need for emissions offsets is discussed in this section as well. Discussions with SCAQMD's Engineering Division staff indicated that emissions offsets will be required for on-site stationary equipment and mobile equipment. District regulations do not require offsets as suggested by the comment.

Neither CEQA nor NEPA requires the provision of emissions offsets, which are emissions reductions calculated in accordance with precise regulatory procedures. Rather, CEQA and NEPA require an accurate assessment of the air quality impacts associated with a proposed project; a determination as to whether the project's impacts are significant; and the use of all practical mitigation measures to reduce significant impacts. Both the draft and the final EIS/EIR comply with these requirements.

27. In general, alternative fuels do not result in inherently lower emission levels. For on-highway vehicles, California's low-emission vehicle regulations, and the corresponding requirements of SCAQMD Rule 1601, achieve the objectives of what are popularly referred to as "alternative fuels." While alternative fuels may be used to comply with these regulations, they are not essential, nor do they provide any air quality benefits as compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low-emission vehicle programs are discussed in the draft EIS/EIR (Appendix E, pp. 107-108).

For locomotives and landfill equipment, alternative fuels may provide air quality benefits. Appendix E of the draft EIS/EIR discusses the use of alternative fuels (such as methanol, natural gas, or liquefied petroleum gas) as well as electricity for locomotives (pp. 115-117) and for landfill equipment (pp. 120-121). Wherever available, MRC shall purchase and operate the electric version of landfill equipment including overhead cranes, crushers, conveyors, and pugmills wherever available. Where not available, alternative-fuel technology will be used depending on air permitting standards (Mitigation Measure AQ-16). Electrification of this equipment would reduce the emissions associated with landfill equipment by approximately five percent. The actual emissions reductions associated with these measures are shown in Table FEIR-AQ-4 (Appendix M, Attachment 2 of the final EIS/EIR).

No quantification of air quality benefits from the use of alternative fuels in locomotives and in landfill equipment is possible at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used in the Eagle Mountain project.

Electrification of the 52-mile stretch of track between Ferrum Junction and the landfill site was discussed in the draft EIS/EIR as potentially feasible. Mitigation Measure AQ-10 requires the preparation of a feasibility analysis of electrification at such time as there is sufficient landfill gas. Table FEIR-AQ-5 in Appendix M, Attachment 2 of the final EIS/EIR shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

28. See Response 0003-40.

29. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

30. Please refer to Responses 0001-128 and 0052-4.

31. The transport of hazardous materials is not a part of the proposed action. Therefore, no response to this comment is necessary.

32. The financial assurances for the cleanup of a reasonably foreseeable escape of leachate from the landfill are described in Responses 0001-25 and 0027-63. Additionally, funds collected as the host community fees will be expended upon the authority of Riverside County in ways which the County deems appropriate. The expenditure of funds set aside as a contingency against potential environmental cleanup will be administered by the agency having jurisdiction over the cleanup process.

33. See Response 0038-2.

34. Waste diversion programs are identified in the draft EIS/EIR (pages 108 and 109), including recycling, yard waste composting, and source reduction. However, the need for a large-scale or a number of smaller-scale landfill projects in the region would still be present. Therefore, waste diversion programs are considered but eliminated from detailed analysis as feasible alternatives to the proposed project in the draft EIS/EIR. It should be noted that mandatory regional and local recycling programs are presently in place. Recently enacted state legislation (AB 939) establishes a mandatory program to divert residential solid waste from the landfills through recycling and waste reduction programs. Specific goals of AB 939 require 25 percent of the solid waste diverted from landfills by 1995 and 50 percent diverted by the year 2000. The City of Los Angeles has recently adopted an additional ordinance which requires the diversion of recyclable municipal materials, though industrial and high-density residential waste is excluded. These measures have been taken to reduce the amount of solid waste entering regional landfills.

35. See Response 0102-32 above.

36. The air quality impacts resulting from the proposed project are identified in Section IV.D. of the draft EIS/EIR and are summarized in Response 0026-8. This comment is correct. While the recent reduction in trucks would reduce traffic effects, the impacts to air quality would remain significant and unmitigated.

37. The waste-to-energy concept is addressed in the draft EIS/EIR (see page 105-106) to avoid impacts associated with landfilling. The document concluded that the emissions

resulting from a waste-to-energy (incineration) operation at the Eagle Mountain landfill would represent a substantial and significant air quality impact.

38. The landfill will be designed to withstand the maximum probable earthquake without damage to the foundation, fill slopes, or structures which control leachate and gas collection or surface drainage. See Responses 0001-5, 0001-24, and 0026-82.

39. The proposed project is expected to have a positive, not negative, influence on real estate and property values in the surrounding area. See Response 0018-13.

40. The proposed landfill project would not result in disease or mental and emotional risks, and therefore, financial assurances for these issues are not required.

41. See Response 0102-39.

42a. The draft EIS/EIR addresses impacts from the proposed project on health (see Section IV.B.) and socioeconomics (see Section IV.H.). A loss of business, as suggested in this comment, is not expected as a result of the proposed landfill project. On the contrary, the project is expected to result in a socioeconomic benefit to the surrounding communities due to the increased population, employment, and income resulting from the operation of the proposed facilities. The increase in landfill-related jobs would attract commercial support interest to Eagle Mountain. Also, the long-term operation of the landfill would lend stability to communities and sustain community services. A trust fund would not be necessary.

42b. With respect to financial assurances for environmental concerns, funds collected as the host community fees will be expended upon the authority of Riverside County in ways which the County deems appropriate. The expenditure of funds set aside as a contingency against potential environmental cleanup will be administered by the agency having jurisdiction over the cleanup process. Also see Response 0027-63.

43. See Response 0020-5.

44a. The allegations of illegal dumping in the East Pit have been reported to the Riverside County Environmental Health Division for investigation. They do not relate to the adequacy or accuracy of the draft EIS/EIR; therefore, no further response is necessary.

44b. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

44c. See Response 0102-44a.

45. Through the scoping sessions conducted for this project in 1989, potentially significant impacts resulting from the proposed project were identified. This process served to define the issues to be analyzed in the environmental document. Section IV of the draft EIS/EIR, Environmental Consequences, describes the impacts from all phases of landfill construction and operation for the issues identified in the scoping sessions. The cumulative impacts from landfill operations are presented in Section V of the draft EIS/EIR. Without more detail in this comment as to the specific risks involved, a more detailed response cannot be provided.

46. It is unclear what is meant in this comment by the "social risk perception of the help." It is assumed that this comment is referring to the safety of the landfill workers. This issue is addressed in Section IV.B.5 of the draft EIS/EIR. The required safety measures to protect the health and safety of the employees is described in Responses 0001-112, 124, and 129. Since hazardous materials will be removed from the waste stream at the MRFs and transfer stations prior to transport to Eagle Mountain, landfill workers will not be exposed to toxic substances. However, a small amount of locally generated waste (on the order of several tons per day) transported directly to the landfill would not be screened for hazardous materials at the MRF. Instead, this incoming material would be inspected at the waste screening facility near the Phase II container handling yard. A description of this procedure can be found on pages 39 and 40 of the draft EIS/EIR. Hazardous materials encountered at this facility will be segregated and stored in accordance with the appropriate regulations and periodically shipped to a hazardous waste disposal site by licensed hazardous waste carriers. All employees who might be exposed to hazardous materials will be trained to an appropriate level of expertise and will be equipped to handle such materials as deemed by the Local Enforcement Agency (Riverside County Department of Health).

47. See Response 0102-32.

48. See Response 0102-36.

49. See Response 0001-25.

50. See Response 0003-40.

51. See Responses 0001-25 and 0002-4 above. No drainage from the proposed project will be directed toward the open Colorado River Aqueduct. Drainage outlets and other upstream facilities will be designed and sized to minimize velocities and reduce erosion. Where drainage is planned to cross the covered portion of the aqueduct, MWD will be consulted as to design and location. Copies of the final drainage report and detailed plans were forwarded to MWD for review. All drainage facilities for conveyance of flow over

the aqueduct will be reviewed and approved by MWD prior to construction. The drainage report is contained in Appendix L of the final EIS/EIR.

52. A more detailed description of the traffic impacts at the MWD pumping station is provided in Response 0027-57. In addition, MRC has proposed that truck traffic to the project site will be reduced from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This would account for total traffic on Eagle Mountain Road and its extension of up to 285 daily trips. This is not considered a significant traffic impact. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

53. The draft EIS/EIR (page 25) states that the proposed action is to widen the existing portion of Eagle Mountain Road and build a new 40-foot-wide paved road. The total right-of-way being applied for is 110 feet to allow for the paved roadway, shoulders, and berms. The proposed improvements to the roadway would be made to accommodate the types of vehicles serving the landfill.

54. Kaiser Road currently provides the only paved, all-weather access road to the Eagle Mountain community and the only access route between the elementary school and fire station in Eagle Mountain and the other residential areas around Desert Center. Any catastrophic accident along Kaiser Road would block this access route. While the new railroad crossing along Kaiser Road would add a small increment to the possibility of such an accident, the project would also provide a second paved, all-weather access route between Eagle Mountain and Interstate 10. This route would consist of the existing Eagle Mountain Road, the proposed Eagle Mountain Road Extension, and paved access roads within the landfill property itself. This route would ordinarily not be open to the public, but it would be available for emergency services or very limited public use during such an accident.

55. See Response 0027-59.

56. See Response 0027-58.

57. See Response 0102-51 above.

58. See Response 0102-51 above.

59. See Response 0027-49.

60. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

61. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

62. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

63. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

64. The socioeconomic benefits of the project are described in Section IV.H.2 of the draft EIS/EIR. A discussion of the benefits to the Kaiser retirees is located in Response 0102-11 and 12 above. The conditions of the memorandum of understanding between MRC and the County of Riverside can be found on page 476 of the draft EIS/EIR.

65. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

66. Please see Response 0026-26.

67. See Response 0026-13.

68. No part of the desert tortoise mitigation program was based on work conducted by Jean Carr. Jean Carr did not participate in the preparation of the draft EIS/EIR. Any tortoise that may potentially be impacted by road or rail line construction will be moved approximately 300 feet from the site of disturbance, which would likely keep the tortoise within its normal home range (Appendix F, pp. 85-86). No tortoises will be removed from the general vicinity and none will be euthanized.

69. See Response 0027-82.

70. See Response 0026-28.

71. Pressure is required to drive either a fluid or a gas/vapor through the proposed landfill cover. The proposed drainage plan is designed to prevent ponding of water necessary to create the pressure needed for water to percolate through the cover. Due to the hot and dry climate at the site, moisture in the refuse can evaporate up through the cover material, since water vapor can rise in air. However, much of this water vapor will be extracted with the landfill gas by the proposed gas extraction system and become landfill gas condensate.

72. The draft EIS/EIR does not say that the Chuckwalla Valley water basin is closed. Moreover, it seems that the statement that "water drains from the Eagle Mountain/Desert

Center Area to the Colorado River" refers to surface drainage, not groundwater flow. In any case, the draft EIS/EIR does not appear to conflict with this comment.

73. Please see Responses 0026-34, 0001-25, and 0002-4.

74. See Response 0001-11.

75. The cited potential failures are for what is commonly called a dendritic type of leachate collection and removal system. A dendritic system is composed of a series of perforated pipes laid in trenches backfilled with gravel drainrock. The cited types of potential failures in this comment are some of the reasons a blanket-type leachate collection system has been selected for the proposed project. For a more complete description of the blanket drainage system and its workings within the containment system, see the drainage report contained in Appendix L of the final EIS/EIR.

76. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a low-permeability soil layer and a high density polyethylene (HDPE) flexible geomembrane will be placed over the entire area underlying refuse. A composite liner (i.e., a geomembrane placed directly on top of a layer of low-permeability soil) is more effective than either a geomembrane alone or low-permeability soil alone for containing leachate and gas (Daniel 1990; Giroud and Bonapart 1989b; USEPA 1987). A composite liner represents the state-of-the-art in landfill liner system design. For a more detailed description of the liner, please see Response 0002-4 and Section II.B.1 of the final EIS/EIR.

77. See Response 0021-27.

78. Please sees Responses 0002-4, 0026-33, and 0102-76.

79. See Response 0115-6.

80. In the event of rail service interruption, trucks would temporarily be required to transport waste normally carried by rail at full capacity. As indicated on pages 352-353 of the draft EIS/EIR, refuse would be taken by truck to Eagle Mountain or to alternate area landfills until rail service is resumed. "This additional response would help ensure steady flow of refuse to the Eagle Mountain site or to alternate area landfills depending upon the location of the train disruption" (p. 353). It is expected that these occurrences would be infrequent and of short duration; therefore, impacts (noise, air quality, traffic, public safety) would not be significant.

81. See Response 0026-38.

82. See Response 0017-22.

83. Closure and post-closure costs must be borne by the operator in accordance with both federal and state regulations (Subtitle D and Chapter 15, respectively). Closure and post-closure costs will be formatted according to the requirements of Title 14 of the California Code of Regulations.

84. Data obtained from the Federal Railroad Administration identifies Southern Pacific rail accidents occurring within Riverside and San Bernardino counties over the past 10 years. The total reported rail accidents for the two counties for this time period is 148 as shown below. It should be noted that this information represents simple numbers of accidents, and has not been corrected to reflect differences in rail traffic volume.

Year	Number of Accidents
1982	22
1983	20
1984	22
1985	22
1986	17
1987	9
1988	6
1989	16
1990	11
1991	5 (through March)

Of the 148 accidents occurring between 1982 and 1991, 63 were on rail lines primarily used by the proposed project located between the West Colton Station in San Bernardino County to Ferrum Junction in Riverside County. Of these 63 accidents, 46 (or 73 percent) occurred in the rail yards and industrial areas, while 17 (27 percent) took place on the main rail lines. Of the 17 accidents occurring on the main line, 8 involved derailments ranging from 1 to 37 cars. The remaining 9 accidents did not involve derailment of railcars.

To avoid rail conflicts between proposed operations and ongoing rail operations, scheduling of refuse unit trains with Southern Pacific will occur on a contractual basis. The draft EIS/EIR (page 357) concludes that project-related usage of rail transport is expected to have an insignificant impact on the rail lines and surrounding infrastructure. Furthermore, the refuse trains would only transport municipal solid waste (nonhazardous materials), reducing the risk to public health and safety. In the event of a rail accident, Southern Pacific's emergency response plan would be initiated. See Response 0026-3 for more details of this plan.

85. The screening of hazardous wastes will take place at the MRFs and transfer stations under the requirements of the solid waste management facility permit. A description of this process is provided in Response 0002-8.

86. See Responses 0017-19 and 0021-19.

87. A discussion of waste diversion programs, including green waste and composting to reduce the waste entering landfills, is given on pages 105-109 of the draft EIS/EIR. Green waste may be removed from the transfer stations and MRFs for composting. The green waste will not be transported to Eagle Mountain for landfilling or storage as a recyclable.

88. Composting operations will not occur at the landfill site.

89. See Responses 0102-23a, 23b, 24, 25, 26, 27, and 28 above.

90. This comment is correct. Subsequent to preparation of the draft EIS/EIR, MRC has proposed to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). More details of this project modification can be found in Section II.B.2 of the final EIS/EIR.

91. The memorandum of understanding between MRC and the County of Riverside is discussed in the Socioeconomics section of the draft EIS/EIR (page 476). A fiscal analysis was prepared by the applicant and presented at the November 11, 1991, Planning Commission hearing. See Response 0018-13.

92. The commenter should note that the purpose of CEQA is to provide information concerning the potential environmental impacts of the proposed project, so that the public and elected officials may make informed decisions concerning the project. In that sense, the draft EIS/EIR relates to the health, safety, and welfare of the citizens of Riverside County. However, without more specific direction, this comment cannot be addressed, nor does it question the adequacy or accuracy of the draft EIS/EIR.

93. The issues of operator liability, financial responsibility, closure and post-closure funding, and the like are addressed in the Development Agreement between MRC and the County of Riverside and in the waste discharge requirements permit issued by the Regional Water Quality Control Board and the landfill facilities permit to be issued by the Riverside County Local Enforcement Agency with the concurrence of the California Integrated Waste Management Board. Before any operations at the landfill can commence, financial responsibility will need to be demonstrated by MRC for third party liability, closure and post-closure maintenance of the site, financial assurances necessary to ensure corrective action for potential groundwater contamination, and full indemnification of

the County of Riverside. MRC intends to contract with users of the landfill (municipal and private) for indemnification of itself and the County of Riverside for any liabilities resulting from the deposit of waste at the site generated by such user. This intention will be embodied in any final Development Agreement approved by the County for the project.

DOCUMENT 0103 Letter from Joan Cory, September 20, 1991

1. Conformance with AB 939, the "Recycling Bill," will take place at the MRFs and transfer stations as part of the facility permits, prior to being transported to Eagle Mountain. The proposed landfill project will only indirectly enforce compliance of the removal of recyclables and hazardous waste through the mechanism of not accepting residual waste unless the recyclables and hazardous materials have been removed.

2. It is a Specific Plan condition of approval to ensure that the materials recovery facilities are in place prior to the commencement of landfill operations and that all waste be pre-processed before being transported to Eagle Mountain.

3. As described on pages 39 and 40 of the draft EIS/EIR, a waste screening and inspection facility will be located at the Phase II container handling yard which will inspect up to several tons per day of waste generated from the local area. This facility would inspect the locally generated refuse for the removal of hazardous materials; however, no provisions are made for the removal of recoverables at this facility. This project would not preclude the implementation of curbside recycling programs within the local communities using Eagle Mountain, however.

DOCUMENT 0104 Letter from Vernessa and Paul Skates, September 17, 1991

This letter was mailed to both the Riverside Planning Department and the Bureau of Land Management area offices. The concerns expressed in these letters are similar in nature and thus, for the sake of economy, appear only once in the final EIS/EIR and are addressed below. All letters submitted are on file at the County and the BLM area offices.

1. The proposed mitigation measures outlined in the draft EIS/EIR would reduce biological resources impacts to a level below significance. The draft EIS/EIR concludes that the air quality in both the South Coast Air Basin and the Southeast Desert Air Basin will be degraded by increased emissions resulting from the project's truck and train traffic and on-site equipment. Potential air quality impacts will not be mitigated below a level of significance. Please see Response 0026-23b for a discussion of mandatory recycling programs presently in place.

DOCUMENT 0105 Letter from Joe B. Gustafson, September 15, 1991

This letter was mailed to both the Riverside Planning Department and the Bureau of Land Management area offices. The concerns expressed in these letters are similar in nature and thus, for the sake of economy, appear only once in the final EIS/EIR and are addressed below. All letters submitted are on file at the County and the BLM area offices.

1. Project impacts to the residences at the pumping station are discussed in Response 0027-57.

2. See Response 0027-57 for a discussion of traffic impacts to the residences at the MWD pumping station.

3. The long-term effect that the project would have on recreation resources due to the anticipated increase in the desert population and increased recreational activities is discussed on page 595 of the draft EIS/EIR.

4. The comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0106 Letter from Ken Levy, September 16, 1991

1. The relative impacts of the proposed project and of all the alternatives, including the "No Project" alternative, are discussed in the draft EIS/EIR separately for the South Coast Air Basin and for the Southeast Desert Air Basin (see Appendix E, pp. 204-210). There are no approved regional air quality models which can be used to perform the analysis requested. Regional photochemical models, such as those used to prepare regional air quality plans, are not suitable for this purpose, because they are insensitive to changes in emissions which are less than five percent of the regional total. The emissions changes associated with the Eagle Mountain project are below this sensitivity threshold in both the South Coast and the Southeast Desert air basins.

2. See Response 0026-8. A screening level health risk assessment conducted for the proposed landfill is discussed on pages 424-427 of the draft EIS/EIR. This risk assessment was updated based on on-site meteorological data and updated unit risk values and is contained in Attachment 9, Appendix M of the final EIS/EIR. See also Response 0003-40. The document identifies impacts to air quality in the region as being significant and not mitigated.

3. Mitigation measures for the Southern Pacific main line (which travels through the San Gorgonio Pass) were not evaluated in the draft EIS/EIR because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to

implement or require such mitigation measures for the project. However, the lead agencies can suggest that this mitigation measure be adopted as part of its project decision.

Air emission impacts from and mitigation measures for the Eagle Mountain railway diesel locomotives are discussed in the draft EIS/EIR (see Appendix E, pp. 76 and 108-117). In addition, Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from the Eagle Mountain railway locomotives. The revised Mitigation Measure AQ-9 includes a specific timetable for conducting the feasibility study. A comparison of the emissions from the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M). Air emission impacts from and mitigation measures for diesel locomotives are discussed in the draft EIS/EIR (see Appendix E, pp. 76 and 108-117).

4. See Response 0026-79. The number of tortoises to be translocated cannot be estimated at this time. Given the generally low quality of the habitat along Eagle Mountain Road, few if any individuals may require translocation. No long-term studies on tortoise survival after translocation have been completed, although one such study is under way. Since it is believed that tortoises will not need to be moved far, this will increase their survivability because they will likely still be within their home range.

5. Please refer to Responses 0059-3, 6, and 7 for a discussion of project impacts to Joshua Tree National Monument.

6. AB 939 is a mandatory program which requires that 25 percent of the solid waste be diverted from landfills by 1995 and 50 percent be diverted by 2000. Please refer to Response 0006-1.

DOCUMENT 0107 Letter from Carol A. Wiley, September 19, 1991

1. The air quality impacts associated with the project, as proposed, as well as with the other alternatives, including the "Rail Only" alternative, are compared in Appendix E (pp. 204-231) of the draft EIS/EIR.

   In general, alternative fuels do not result in inherently lower emission levels. For on-highway vehicles, California's low-emission vehicle regulations, and the corresponding requirements of SCAQMD Rule 1601, achieve the objectives of what are popularly referred to as "alternative fuels." While alternative fuels may be used to comply with these regulations, they are not essential, nor do they provide any air quality benefits as compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low-emission vehicle programs are discussed in the draft EIS/EIR (Appendix E, pp. 107-108).

For locomotives and landfill equipment, alternative fuels may provide air quality benefits. Appendix E of the draft EIS/EIR discusses the use of alternative fuels (such as methanol, natural gas, or liquefied petroleum gas) as well as electricity for locomotives (pp. 115-117) and for landfill equipment (pp. 120-121). To reduce diesel fuel consumption, MRC shall purchase and operate the electric version of landfill equipment including overhead cranes, crushers, conveyors, and pugmills wherever available. Where not available, alternative-fuel technology will be used depending on air permitting standards (Mitigation Measure AQ-16).

Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from Eagle Mountain railway locomotives. The revised Mitigation Measure AQ-9 includes a specific timetable for conducting the feasibility study. A comparison of the emissions from the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M).

No quantification of air quality benefits from the use of alternative fuels in landfill equipment is possible at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used in the Eagle Mountain project.

2. The mandatory recycling program, AB 939, is described on pages 4 and 106 of the draft EIS/EIR (see Response 0006-1). The method of removing recyclables before transporting refuse to Eagle Mountain for landfilling is described in Response 0096-14. Storing of recyclable materials at the site is addressed in Responses 0017-19, 0021-19, and 0021-24.

3. The final landfill cover is discussed on page 73 of the draft EIS/EIR. The final cover would be implemented in compliance with the regulations of Title 23, CCR, Chapter 15. The cover would have a minimum thickness of four feet and would consist of a two-foot foundation layer, a one-foot barrier layer, and a one-foot vegetative layer. The vegetative layer of earth would be amended with compost or humus and fertilizers such that it will support vegetative growth. The vegetative layer will allow natural vegetation to take hold on the landfill cover to provide erosion control. In many cases, the minimum depth of one foot for the vegetative layer will be exceeded merely because of the means to be used to apply the cover. More details of the revegetation measures are provided in Response 0111-66. Post-closure requirements mandate that the final cover, including the vegetative layer, be maintained to prevent erosion and ponding of water. The upper

surface of the landfill would have a minimum three percent gradient to provide adequate drainage and limit the potential for ponding and erosion on its surface.

DOCUMENT 0108 Letter from Ron Salz, September 22, 1991

1. Refuse destined for landfilling at Eagle Mountain must comply with the provision of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program for the removal of recyclables and hazardous materials as described in Response 0026-4. If refuse does not comply, it will not be taken to Eagle Mountain.

2. Final permitting by the LEA and the CIWMB will only authorize the opening of the Eagle Mountain landfill. Acceptance by Riverside County of refuse from Los Angeles and other counties is contingent upon the approval of the project Development Agreement authorized by the Riverside Board of Supervisors.

DOCUMENT 0109 Letter from Christine Samons, September 19, 1991

1. The memorandum of understanding is an agreement between MRC and Riverside County which mandates that MRC pay the County based on the solid waste actually disposed of at the landfill. The components of the MOU are described on page 476 of the draft EIS/EIR. Issues such as operator liability, financial responsibility, and closure and post-closure funding will be included in this agreement and in the waste discharge requirements permit issued by the Regional Water Quality Control Board and in the landfill facilities permit to be issued by the Riverside County Local Enforcement Agency with the concurrence of the California Integrated Waste Management Board. The final Development Agreement will be approved by the Board of Supervisors as one of the discretionary actions being requested by the applicant of the County and will be a legally binding agreement.

2. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

3. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0110 Letter from Shirley M. Boylan, September 23, 1991

1. The proposed right-of-way width for Eagle Mountain Road is 110 feet to accommodate the 40-foot-wide two-lane road, as well as shoulders and berms. Although the road will

remain two-lane, the improvements to this segment of roadway will improve the overall conditions of Eagle Mountain Road, which would thus have a positive traffic effect.

2. In the event of rail service interruption, it is unlikely that all refuse would be transported to Eagle Mountain. However, under a worst-case scenario, 650 trucks could utilize Eagle Mountain Road temporarily until rail service is resumed. Please see Response 0021-7 for a more detailed description of this scenario.

3. The draft EIS/EIR estimates 85 percent of the 500 total daily trips will be to and from the west, which calculates to 425 total daily trips utilizing Eagle Mountain Road by employee, delivery, and service vehicles traveling to and from the site.

4. At the two existing crossings of the railroad, Eagle Mountain Road Extension and Kaiser Road, railroad crossing signs are presently located at the side of the road. Flashing lights will be installed where the railroad crosses Kaiser Road (draft EIS/EIR, page 360). A two-way stop will also be installed at this intersection for Kaiser Road's intersection with Eagle Mountain Road Extension (draft EIS/EIR, page 365). No change will take place at the existing Eagle Mountain Road railroad crossing.

5. Noise impacts of the proposed landfill operations, including rail transport, on the residences at the pumping station are discussed in Response 0027-57.

6. See Response 0027-49 and 59 for a discussion of traffic impacts to the residences at the MWD pumping station.

7. See Response 0110-4 above.

8. Free leachate will not be diverted off-site over the aqueduct as suggested in this comment. To clarify this issue, only surface runoff that is collected before coming in contact with refuse at the landfill will be diverted off-site. Runoff that comes in contact with refuse (and wash water) will be collected, treated on-site, tested, and reused for dust control. All leachate and condensate collected will be temporarily stored on-site and disposed of at an approved off-site disposal site.

9. See Response 0027-58.

10. The geology report prepared for the site by Dr. Richard Proctor, dated September 12, 1991, documents that the potential for "severe" ground shaking identified in the draft EIS/EIR should be reclassified as "low to moderate." The effect of such seismically induced ground shaking will be negligible (0.1 gravity) for the entire site and its facilities. This report is available at the County of Riverside Planning Department, Riverside,

California, and at the BLM Resource Area Office, North Palm Springs, California. Also, see Responses 0027-82 and 0027-41a.

11. This comment is correct that the Phase I rail line will pass approximately 750-1,000 feet from the existing Eagle Mountain school buildings. Phase I operations would involve one round-trip train per day to the Phase I container handling yard. At this level of activity and distance, the projected CNEL at 700 feet would be approximately 53 dBA. This does not represent a significant residential noise impact.

12. Impacts of the proposed landfill operations, including rail transport, on the residences at the pumping station are discussed in Response 0027-57.

13. See Response 0027-57.

14. Nonhazardous solid waste materials would be transported from the transfer station to the landfill site via rail in closed intermodal transport containers. A description of these containers can be found in Response 0021-25. A health hazard would exist only if the containers broke open and spillage occurred. Emergency response plans to address major accidents on roadways and rail lines are already in place at the local government level, as part of federal and statewide programs (see Response 0026-3 for greater detail). As part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers to supplement Southern Pacific workers and to accomplish trash pickup as necessary (page 352).

15. Vectors, windblown debris, and dust would all be generated by the proposed project. However, the project includes numerous design features to minimize the effects of these impacts. The measures are identified on pages 325-326, 345, 514-517, and 529-530 of the draft EIS/EIR.

16. Air quality impacts for the proposed project have been determined to be significant and not mitigated to a level below significance. No compensation for air pollution is provided. This condition would not, however, preclude project approval. California Public Resources Code Section 21081 provides that if the economic, social, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable.

    With respect to water pollution, the RWQCB, pursuant to Chapter 15 requirements, is requiring the project proponent to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for a reasonably foreseeable release from the landfill. This financial assurance for the cleanup must be completed as part of the permitting process even though leachate is not expected to pass through the landfill containment system.

17. See Responses 0017-10 and 0027-54.

DOCUMENT 0111 Letter from Sierra Club - San Gorgonio Chapter, September 20, 1991

1. Revisions to Table 51 of the draft EIS/EIR are noted in Section VI of the final EIS/EIR and show that rail haul operations will use 21,404 gallons of diesel fuel per day and transfer station operations would use 2,160 gallons of fuel per day. This comment postulates that the air quality calculations are flawed but does not identify in what way or how; therefore, specific responses cannot be given, nor are they required by CEQA or NEPA. The air quality section of the draft EIS/EIR and Appendix E are the largest sections of the document; they are not cryptic. See Response 0026-8 for a general discussion of air impacts due to this project. Cumulative air quality impacts are discussed on page 592 of the draft EIS/EIR.

2. Waste management programs will continue in the Los Angeles area regardless of the status of the Eagle Mountain project. See Responses 0006-1 and 0011-1. See also pages 105-109 of the draft EIS/EIR for a discussion of waste diversion programs.

3. See Response 0018-13. The project is expected to result in a socioeconomic benefit on the surrounding communities due to the increased population, employment, and income resulting from the operation of the proposed facilities. The increased population could also have a positive influence on real estate and property values in the surrounding area. Additionally, the long-term operation of the landfill would lend stability to communities and sustain community services. Please refer to Section IV.H. of the draft EIS/EIR for a further discussion.

4. In the event of rail service interruption, several scenarios are possible depending on the location and nature of the delay. The draft EIS/EIR, pages 352-353, state that in the event of rail service interruption, 650 trucks per day would be required to handle the portion of the refuse normally carried by rail at full capacity of 20,000 tons per day. However, prior to shifting to the use of 650 trucks, the draft EIS/EIR points out that a surplus of containers within the system can be used to load and store refuse temporarily at transfer stations or to store containers at rail sidings if the service interruption occurs during rail haulage. It is also possible to send refuse to other landfills until rail service is resumed. "This additional response would help ensure steady flow of refuse to the Eagle Mountain site or to alternate area landfills depending upon the location of the train disruption" (p. 353).

5. The use of the Eagle Mountain landfill by particular individuals or communities is not required. See pages 476 and 477 for a discussion of the current and anticipated costs associated with waste disposal. Tipping fees and transportation charges will be based

on market forces. As existing landfill space is consumed, the cost of new landfill space will increase. Because of the higher costs of land, more stringent environmental controls, and the need to recycle, disposal costs will inevitably increase, regardless of the location of the new landfill. Waste collection fees in southern California have steadily increased from the early 1980s to present. It is estimated that the additional cost for disposal will be on the range of $1.50-$4.00 per month per household, depending upon the present rate structure.

6. Phase I operations would involve a maximum of one train per day transporting refuse to the container handling yard. There are three schools at the town of Eagle Mountain. The elementary and middle schools are not currently being used. The high school is currently used by the elementary students. It is approximately 1,000 feet from the rail line. One train per day is not expected to significantly affect the school. When landfill needs exceed one train of refuse per day, the Phase II operations will be implemented whereby refuse will be transported to the Phase II container handling yard located approximately 7,000 feet from the school. Due to the distance of the proposed spur line serving the Phase II container handling yard to the school, no significant impacts to the school would result.

7. The project operator would only accept the amount of waste permitted. As the Local Enforcement Agency, the Riverside County Department of Health would be responsible for monitoring the amount of waste entering the landfill.

8. The conditions of the memorandum of understanding between MRC and the County of Riverside are discussed in the Socioeconomics section, page 476 of the draft EIS/EIR. Fifty percent of revenues is not mentioned in the MOU, but rather some “portion” will go to the local communities.

9. The waste inspection process is described on pages 331-333 of the draft EIS/EIR. Please see Responses 0002-8 and 0021-27.

10. MRC will be required to comply with the requirements of CCR Article 5 of Chapter 15, which require the implementation of a verification monitoring program if monitoring shows that the water quality protection standards are exceeded. See Response 0002-5 for details of the monitoring program. In the event groundwater recovery becomes necessary, a corrective action program, including pumping of extraction wells to remove the groundwater, will be implemented in accordance with current regulations.

11. The project is southeast of Joshua Tree National Monument and at its closest point is approximately 8,000 feet south of the boundary. Measures to control windblown debris associated with landfill operations are addressed in Section IV.J.4 of the draft EIS/EIR. The draft EIS/EIR further discusses the project operation that would influence the amount of litter that might be windblown. It should be noted that the project’s operation is quite

different from conventional landfills. All waste entering the landfill must be processed for materials recovery and recycling away from the landfill and compacted into closed containers which must remain closed until the containers are opened near the face of the landfill. The waste will come out of the containers in large clumps or plugs and spread out by a compactor tractor. This refuse will be pushed to the face of the landfill where it will be compacted and covered with at least six inches of soil. This process will minimize the opportunity for the wind to pick up litter. Additionally, portable litter fencing at each cell will catch windblown litter.

Next, full-time personnel will be assigned to litter control. Because the landfill site is quite large, the operator will be able to contain windblown litter within the site boundaries by intensifying the labor effort when necessary. Moreover, there is a large area within the Eagle Mountains which can be patrolled for litter control prior to entering the monument. Finally, as a last resort, if monument personnel determine that a problem from windblown litter is developing, they will call the landfill operator for timely removal of any litter which has entered the monument. This procedure was initiated by Park personnel during meetings held at the park in 1990. All costs will be assumed by the landfill operator.

Finally, as pointed out in the draft EIS/EIR (p. 270), the project area is separated from the monument by a major ridgeline (elevation 2,000-3,500 feet) which blocks views from the monument into the project area. This ridgeline can also pose as a natural barrier to windblown debris, allowing for litter control to occur prior to the monument boundaries. Also, the proposed project includes a storm warning system that would allow for the closing of landfill operations and the cover of litter prior to the arrival of a potentially windy storm.

For a discussion of odor impacts, see Response 0001-97.

12. Compensation for local citizens for environmental degradation is not a matter for MRC to consider. Rather, approval of the project by the County Board of Supervisors and the BLM under the "overriding considerations" concept is required. Obviously, if these agencies feel that the overall benefit to society in general exceeds the project's environmental degradation that would occur, then the County would feel the society in general would benefit. A fiscal analysis of the proposed project's effect on the County by the County of Riverside Administrative Office concludes that there will be a net positive fiscal benefit. This analysis was presented to the County Planning Commission on February 26, 1992, in a public hearing. Local citizens are liable to benefit by the infusion of host fees into their communities, the creation of local employment, provision of school improvements, and other county-funded services. The socioeconomic benefits of the project are described in Section IV.H.2 of the draft EIS/EIR.

13. Please refer to Response 0015-2.

14. See page 476 of the draft EIS/EIR. Since this comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

15. No loss of business or human life is expected with this project. On the contrary, positive economic and growth benefits are anticipated. Please refer to Response 0111-3 for a discussion of the socioeconomic effects of the proposed project. For a discussion of public safety, see Section IV.B.6 of the draft EIS/EIR. Protection of worker safety is discussed in Response 0001-122 and in Section IV.B.5 of the draft EIS/EIR.

16. Please refer to Response 0015-2.

17. Please refer to Response 0015-2.

18. The Purpose and Need section (page 4-5) of the draft EIS/EIR discusses the need for additional refuse disposal facilities in Los Angeles, San Bernardino, and Orange counties as well as Riverside County. The Project Description section of Appendix B states that out of county waste will be accepted. Section III.C. of the draft EIS/EIR identifies eight rail segments based on locations of the transfer stations along the rail lines and key junction points where trains would be switched on or off a particular route. These segments are described on pages 150-154. Solid waste transported from the MRFs would primarily use the Southern Pacific Railroad right-of-way. The MRF located in the Coachella Valley would use I-10 to Eagle Mountain Road. These transportation corridors are described in detail in Sections IV.C.1 and IV.C.3 of the draft EIS/EIR.

19. The source of the refuse to be landfilled at Eagle Mountain includes Los Angeles, Riverside, San Bernardino, and Orange counties (pp. 4-5 of the draft EIS/EIR). The method of waste delivery to the site (rail and truck) is described on pages xvii and xx of the draft EIS/EIR.

20. The proposed project limits the number of trains which can deliver waste to the landfill site to six and the total tonnage per day to 20,000. These numbers are limits. In fact, the at-grade crossing traffic report used an average of 9.4 (4.7 × 2) rail trips per day (16,000 tpd/3500 tpd per train = 4.57 trains) for analysis purposes (see page 359 of the draft EIS/EIR).

21. The rail component of the project is initially referenced in Sections I and II of the draft EIS/EIR on pages 1, 13, 30, 31, 35, 39, 46, 49, and 50.

22. At maximum operations, the proposed action involves landfilling a total of 20,000 tpd of municipal solid waste: 16,000 tpd would be transported via rail and 4,000 tpd would

arrive via truck (see pp. ii, iii, xvii, 1, and 13 of the draft EIS/EIR). It should be noted that since the preparation of the draft EIS/EIR, the number of daily trucks trips has been reduced by half from 200 to 100 round trips per day. To reach the maximum capacity allowable at the landfill (20,000 tpd) while reducing the truck trip tonnage by half from 4,000 tpd to 2,000 tpd, the amount of refuse transported via train would increase by 2,000 tpd (that is, 12 percent), from 16,000 tpd to 18,000 tpd.

23. Please refer to Response 0015-2.

24. This comment is correct in assuming that economic forces will play a role in the selection of which wastesheds to service. The figures listed in the comment were used conceptually to determine fuel expenditures; however, this comment fails to include Riverside and San Bernardino counties at an estimated 2,000 tons per day each. For the "No Project" alternative, no use of rail was assumed. Emissions associated with this alternative include the type of motor used, the distance and amount of time the motor is used to haul or handle the assumed waste amounts, and the type of fuel used.

25. Please refer to Response 0015-2.

26. Infilling rates are the subject of operating permits granted by the California Integrated Waste Management Board and the Local Enforcement Agency. Increases to the permitted rates must be approved by these agencies prior to any increase being allowed.

27. Please refer to Response 0086-1.

28. The Eagle Mountain landfill will receive waste generated from Los Angeles, San Bernardino, Riverside, and Orange counties, as well as local communities. The County of San Diego is presently committed to handling its own waste and does not transport their waste to other counties. A recently released report indicates that San Diego County has 10 years of remaining landfill capacity (CIWMB draft report 2/20/92). Additional environmental review will be required for any jurisdiction desiring to use the Eagle Mountain landfill in the future. The Solid Waste Management Plan states that ". . . it is illegal to dispose of solid waste at Riverside County-operated Class III landfills which have been generated in other counties, without prior approval. . . . The ultimate decision to allow importation of any solid waste whether in a private or public facility shall rest with the Board of Supervisors on a case-by-case analysis" (page IV-5).

29. See Response 0021-19. There is a cost for shipping and storage of recyclables to Eagle Mountain. Recyclers will have to weigh the costs of this against local storage, expatriation, or immediate reuse. The transport of the remaining materials to be temporarily stored at Eagle Mountain is discussed on page 41 of the draft EIS/EIR.

30. On October 9, 1991, EPA promulgated final revisions to 40 CFR 257 and added 40 CFR 258 to the federal Criteria for Classification of Solid Waste Disposal Facilities and Practices. This new promulgation incorporates the final version of what is commonly called Subtitle D. The revisions to 40 CFR 257 essentially involve conforming changes that make this part consistent with the new Part 258. The new Part 258 sets forth new federal minimum criteria for municipal solid waste landfills (MSWLFs). These new federal criteria were modeled after California's Code of Regulations Title 23, Chapter 15, in many respects. The new regulations also include other requirements that are similar to other state regulations that apply to landfills.

    40 CFR 258 establishes federal criteria for landfill siting, facility design and operations, groundwater monitoring requirements, corrective action requirements, financial assurance requirements, and closure and post-closure care requirements. The effective date of the new regulations is 24 months after date of publication (i.e., September 1993).

    The landfill design will comply with the new federal landfill regulations contained in 40 CFR 257-258, which were adopted after the draft EIS/EIR was published. See Response 0111-10 above. The proposed monitoring program for this project will exceed the requirements of these new regulations.

31. The Eagle Mountain landfill project will not be directly involved in recycling efforts. Instead, recycling programs will be a mandatory component of the MRFs and transfer stations. It will be the responsibility of the owner/operator of each local agency to ensure that the goals of AB 939 are implemented. The City of Los Angeles has recently adopted an ordinance which requires the diversion of recyclable municipal materials. If refuse does not comply with the provisions of AB 939, it will not be taken to Eagle Mountain.

    The County may allow refuse which has not been processed by a MRF to be accepted at Eagle Mountain but under emergency circumstances only.

32. In compliance with the National Environmental Policy Act and the California Environmental Quality Act, the draft EIS/EIR provides a discussion of alternative sites to the proposed project (Section II.G., Analysis of Alternative Sites, page 77). A total of seven alternative sites are discussed in detail in the draft EIS/EIR which includes sites in Los Angeles County. While neither NEPA nor CEQA specifies the number of sites to be addressed, a reasonable range of sites must be evaluated in those cases where consideration of an alternate is warranted. Five additional sites were considered but eliminated from detailed analysis (see page 105 of the draft EIS/EIR).

33. The draft EIS/EIR concludes that the environmental impacts at Eagle Mountain and Amboy would be fairly similar (85-86). Eagle Mountain has a greater total capacity, however.

34. See Response 0006-1.

35. The economic benefits realized from the proposed project, including County tipping fees, are addressed in the Socioeconomic section of the draft EIS/EIR (page 477). Also Refer to Response 0018-3.

36. The Proposed Action alternative presented in the draft EIS/EIR includes transporting 16,000 tpd of waste by rail and 4,000 tpd by truck. By proposing an alternative without truck haulage, the environmental advantages and disadvantages of each form of transportation are more easily compared and contrasted. The Reduced Landfill Operations alternative attempts to reduce some of the biological impacts while maintaining the truck component to serve the local desert waste disposal needs. The analysis was prepared to cover a reasonable range of alternatives. It should be noted that since the preparation of the draft EIS/EIR, the number of daily truck trips to the site has been reduced by half from 200 to 100. This reduced truck scenario is described in Section II.B.2 of the final EIS/EIR.

37. Section 15126 (subd. [d]) of the CEQA Guidelines states that an EIR must describe a range of reasonable alternatives to the proposed project which could feasibly attain the basic objectives of the project. The guidelines add that "the discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance. . . ." An alternative which considers the rail-only transport of 20,000 tons per day of refuse was not developed because it would represent additional and more adverse air quality impacts.

38. The Rail-Only Alternative does not specifically preclude waste from Riverside and/or San Bernardino counties; however, it may not be economically feasible to do so. See Response 0111-37 above.

39. Each alternative, except the No Action alternative, includes accepting local waste from the towns of Eagle Mountain, Desert Center, and Lake Tamarisk. This would amount only to several tons of waste per week.

40. Please refer to Response 0015-2. The comment acknowledges that the draft EIS/EIR does discuss impacts from MRFs. The lead agency (i.e., Riverside County) can request that other agencies, with jurisdiction, adopt specific siting criteria for MRFs.

41. Please refer to Response 0015-2.

42. The transfer stations will be operated under the standards set by the facility permit for the individual station.

43. As the proposed project is a Class III nonhazardous solid waste facility, the transport of hazardous materials to the landfill site would not be permitted. See Response 0002-8.

44. See Response 0111-43 above.

45. The agency which regulates health and safety in the workplace is CAL OSHA. The facility permit required for each transfer station would mandate the implementation of a health and safety program (as discussed on pages 146-147 and 347-349 of the draft EIS/EIR) to ensure that a healthy and safe environment is provided for all employees. Worker safety at Eagle Mountain is discussed on pages 347-349 of the draft EIS/EIR.

46. Detection of radioactive materials will be performed at the materials recovery facilities at the container loading point and prior to container discharge at the landfill (page 40 of the draft EIS/EIR). This will be accomplished by passing the loads through a radioactive detector. This device will signal the presence of radioactive material. Upon identification of a container in which there is suspected radioactive material, it will be off-loaded at the tipping floor for inspection by workers using hand-held monitoring equipment. When located, the radioactive material will be manually removed to an authorized radioactive waste facility (pages 39-40 of the draft EIS/EIR).

47. For the fuel consumption estimates for rail hauling on Southern Pacific tracks, the draft EIS/EIR assumed that fully loaded trains traveled from Southern Pacific's Los Angeles Transportation Center (SPLATC) to Ferrum Junction. The empty trains would return via this same route. The fuel consumption estimates accounted for the various grade changes along the route, using information on diesel locomotive throttle settings supplied by Southern Pacific.

    The SPLATC is a major rail yard facility in East Los Angeles, located approximately in the center of the Los Angeles/Orange County rail network. It is not possible to provide greater detail regarding the location of railcar loading points in the South Coast Air Basin, because no urban transfer stations have been proposed at this time.

48. As shown in Table 51 of the draft EIS/EIR (page 575), the fuel consumption value of 2,160 gallons per day is due to truck travel associated with the urban transfer stations and not, as stated by the commenter, with travel along the rail spur. The commenter is correct in noticing that the fuel consumption rate for rail transport shown in Table 51 is incorrect. The correct value for fuel consumption associated with rail transport (Eagle Mountain as well as Southern Pacific rail hauling) is 21,404 gallons per day rather than 10,425 gallons per day. This fuel consumption rate is for the estimated 4.7 trains that would be required to transport the 18,000 tons per day of refuse. The project does not propose to use 6 trains per day; the document clearly states on page 356 that "the proposed

action is *capable of accepting up to six trains per day* [emphasis added]." The revision to Table 51 is noted in Section VI of the final EIS/EIR.

49. The fuel consumption estimates for rail transport given in the draft EIS/EIR assume that each train consists of 14 articulated railcars, with each car capable of transporting 10 refuse containers. The fuel consumption estimates associated with rail transport given in Appendix E include the empty weight of each refuse container (approximately 5 tons) and the empty weight of each railcar (approximately 89 tons).

50. The draft EIS/EIR concludes that the proposed rail haul project would use more than double (123 percent) the amount of diesel fuel than conventional landfill disposal practices (page 374). LFG production is likely to be low; consequently, the estimate for when enough would be produced to offset diesel fuel consumption is highly speculative (21 to 63 years of operation). This information is provided to the reader of the draft EIS/EIR to fully disclose the potential energy consumption of the proposed project.

51. The Executive Summary clearly states that the air quality impacts of the project are considered significant and not mitigated. Table S-2 in the Executive Summary also states that some air quality impacts are significant and not mitigated. The Summary of Environmental Impacts—Comparison of On- Site Alternatives (page 76) also states that some air quality impacts are significant and not mitigated. The Analysis of Alternative Sites (page 85) states that air quality impacts are significant and not mitigated. The quotation from page 368 of the draft EIS/EIR mentioned in this comment refers to an explanation of the assumptions and guidelines used for assessment of environmental impacts in the Air Quality section of the document. As explained, most of the air emissions from the project originate from vehicles (trains and trucks), not point sources, and, hence, are not subject to regulation. Nevertheless, the air quality technical report uses point source regulations to interpret the air quality impacts.

52. The draft EIS/EIR acknowledges that the proposed project would have a significant impact on air quality in the Southeast Desert Air Basin (see Appendix E, pp. 139-146). The comparison of project impacts with SO_2 emissions from motor vehicles is misleading, because on-road motor vehicles are small contributors to basinwide SO_2 emissions.

53. See Responses 0111-54a through d below.

54a. For the "No Project" alternative, the draft EIS/EIR assumed that the emissions associated with the urban transfer station represented a portion of the truck emissions generated by hauling refuse to existing landfills in the South Coast Air Basin. Therefore, the emissions associated with the urban transfer stations are included in the emissions estimate for the "No Project" alternative.

54b. See Response 0111-54a above.

54c. The reduction in air emission estimates associated with the mitigated urban transfer stations is due to regulatory requirements for the on-highway trucks used by the transfer stations. The introductory statement on page 105 of Appendix E explains how regulatory requirements were or were not used as mitigation. Because the mitigation measures associated with on-highway trucks are adopted and implemented by regulatory agencies, they are binding regardless of the status of the Eagle Mountain project.

54d. See Response 0111-54c above.

55. The purpose of the table cited by the commenter (Table 33; page 100 in Appendix E) is to show that if the landfill gas flares were not equipped with emission controls, the project may trigger federal Prevention of Significant Deterioration requirements. However, as discussed on page 90 of Appendix E, emission controls on the flares are included as part of the project design in order to comply with SCAQMD and with EPA emission standards. Therefore, for the mitigated project, no further emission reductions associated with the landfill gas flares are given (Appendix E, page 132).

56. According to conversations with technical representatives from Caterpillar Incorporated, gasoline engines are not used in heavy construction equipment due to power and duty cycle limitations. Caterpillar does not supply any gasoline engine powered heavy construction equipment and is not planning on developing any gasoline engines for use in this type of equipment in the future.

57. See Response 0093-5. The draft EIS/EIR discusses the past, present, and reasonably anticipated future projects likely to produce cumulative impacts on pages 585-588 and on page 582 indicates that regional cumulative air quality impacts are discussed in the SCAQMD Plan (1989).

58. See Response 0093-5.

59. The growth-inducing impacts of the project, when considered individually and cumulatively, are considered positive and not significant because the service capability required by the increased population is already available.

60. Appendix E of the draft EIS/EIR (page 6) discusses the impacts of various air pollutants on public health and welfare. The California ambient air quality standards are explained and the project's impact on these standards is analyzed throughout the air quality appendix. Each criteria pollutant is discussed for both the South Coast Air Basin and the Southeast Desert Air Basin (pages 8-39). Responses 0003-38 and 0003-40 summarize

the Level 2 Health Risk Assessment which may be found in Appendix M, Attachment 9, of the final EIS/EIR.

61a. In comparing equal tonnages going to Eagle Mountain via rail versus conventional landfills via trucks, the commenter is correct in noting that the total accidents per year by rail would be slightly less than total accidents per year by truck once the distances are accounted for. The statement that ". . . rail freight accidents are frequently massive events . . ." is incorrect, however. Response 0102-84 reviews rail accident records and notes that most accidents are relatively minor.

61b. The effect of the project on the probability of train-related motor vehicle accidents is addressed on pages 358-359 of the draft EIS/EIR, in the discussion of At-Grade Crossings.

62. See Responses 0001-119, 120, 121, 122, 123, 124, 125, and 126.

63. Approximately 150 acres of Category III desert tortoise habitat would be directly impacted through the widening and extension of Eagle Mountain Road (Appendix F, page 80; draft EIS/EIR, page 448). This represents a worst-case scenario. No direct impacts to Category I desert tortoise habitat are expected.

64. No deaths or injuries are anticipated from tortoise translocation. See Response 0106-4.

65. See Response 106-4.

66. See Response 0107-3. Additionally, the landfill final cover will provide far more chance for revegetation to succeed than now exists with the existing reclamation plan that calls for no action.

67. Provided the native seed mix is applied correctly, there should not be the massive erosion problems. A good cover of annual grasses and forbs supplemented with woody perennial shrubs and trees is sufficient to control most erosion problems. The roots of the woody perennial species will be able to penetrate the compacted barrier layer much like they penetrate a hard caliche layer in natural desert soils.

68. This comment does not accurately reflect what the draft EIS/EIR says. The document says: "Copies of this report may be obtained from SCAG or reviewed at the Desert Center library" (p. 243). SCAG has a phone number for its public information office, which will mail any SCAG report upon request. Also, all major SCAG reports such as the referenced report are distributed to member jurisdictions and central libraries. The SCAG report was also discussed in the draft EIS/EIR at pages 77-79.

Additionally, an amplification of the economic analysis was presented to the Riverside Planning Commission on November 13, 1991. The report was prepared by Peat, Marwick and Associates for MRC and submitted as public testimony. The public testimony may be obtained from the County of Riverside.

69. Since the United States is overall an importer of fossil fuels, this project, together with any other requiring energy expenditure, will contribute to increasing the need for those imports. Whether or not importation of fossil fuel causes a trade deficit is dependent on the balance of the country's exports and is not a relevant discussion in this draft EIS/EIR.

70. Appendix H of the draft EIS/EIR states that "The noise measurements were conducted on December 13 and 14, 1989, at 10 locations around the proposed landfill site along rail lines and roadways that will be utilized by the project. Measurements were conducted between 10 a.m. and 6 p.m. for a minimum duration of 15 minutes" (p. 5). The landfill will operate during daylight hours only. For a discussion of noise impacts to wildlife, see Responses 0097-23, 25, and 40.

DOCUMENT 0112 Letter from Citizens for the Chuckwalla Valley, no date

This correspondence represents a petition opposing the proposed Eagle Mountain landfill. It does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0113 Letter from Donna Charpied, September 18, 1991

1. This comment is correct. Several items brought up in the scoping sessions of 1989 have not been addressed in the draft EIS/EIR; however, these items are responded to in the final EIS/EIR. Donna Charpied of Desert Center is on the mailing list to receive the final EIS/EIR.

2. These allegations have been reported to the Riverside County Department of Health for investigation. They do not relate to the adequacy or accuracy of the draft EIS/EIR and no further response is necessary.

3. This comment is related to the Riverside County Waste Management Department landfill located approximately five miles north of Desert Center and does not relate to the proposed action described in the draft EIS/EIR.

4. See Response 0113-2.

5. See Response 0113-2.

6. See Response 0113-2.

7. This comment does not relate to the adequacy or accuracy of the draft EIS/EIR and no further response is necessary.

DOCUMENT 0114 Letter from Donna Charpied, August 28, 1991

The majority of these comments were presented at the public hearing in Desert Center on August 28, 1991. These comments have been addressed in Document 0027. Reference to the responses is provided below.

1. See Response 0027-20.

2. See Response 0027-21.

3. See Response 0027-21.

4. See Response 0027-22.

5. See Responses 0021-12 and 0027-24.

6. See Response 0027-25.

7. See Response 0027-26.

8. See Response 0027-27.

9. See Response 0027-28.

10. The discrepancy between the SCAG study and the projected capacity of the proposed project cannot be accounted for. The projected life span of the project is based on the most current landfill design as depicted in the draft EIS/EIR. Landfill footprint and final elevations are detailed in the project description of the draft document.

11. This comment does not address the adequacy or accuracy of the draft EIS/EIR and no further response is necessary.

12. As a Class III nonhazardous municipal solid waste landfill, state law will not permit the Eagle Mountain landfill to accept "infectious materials." Only nonhazardous solid waste such as garbage, trash, refuse, paper, rubbish, industrial waste, ashes, appliances, food waste, and other materials will be accepted, provided that such wastes do not contain waste which must be managed as hazardous waste or wastes with soluble pollutants in

concentrations that exceed water quality objectives. A discussion of the load-checking process is provided on pages 39-40 and 331-333 of the draft EIS/EIR. Also see Response 0002-8.

DOCUMENT 0115 Letter from Donna and Larry Charpied, September 20, 1991

1. Department of Water Resources Bulletin No. 118 does not indicate the Chuckwalla aquifer is directly connected to the Coachella Valley aquifer. The figure in question (on page 84 of Bulletin No. 118) shows the western boundary of the Chuckwalla Valley basin (7-5) separated from the Orocopia basin (7-31) which extends approximately 30 miles further west. At the western end of the Orocopia basin (7-31), a second boundary separates that basin from the Coachella Valley basin (7-21). Bulletin 91-7 is a 1963 report of data on water wells and springs in the Chuckwalla Valley area. Two sentences refer to the groundwater gradient. "Examination of all water levels in the valley indicates a ground-water gradient from the Desert Center area eastward toward the gap between Mule Mountains and McCoy Mountains. The gradient is steeper in the western half of the valley and is nearly flat in the eastern part." The report makes no reference to groundwater flows, flows into the Colorado River, or flows to the Coachella Valley. In other words, groundwater from the proposed landfill site does not flow towards the Coachella Valley.

2. See Responses 0002-7, 13a, and 13b.

3. Long-term testing of high density polyethylene by the federal EPA has shown no degradation of this material in contact with municipal solid waste. Additionally, HDPE is the material recommended by the EPA for use as a hazardous waste landfill liner. See also Responses 0001-11 and 0026-29.

4. See Response 0115-3. The main element of the leachate collection system is the HDPE liner. Leachate recovery will be effected by using pumps located in permanent riser pipes emplaced during the early stages of landfill construction.

5. "State of the art" for municipal solid waste landfills is a single composite liner formed from a synthetic flexible membrane liner and a low permeability soil layer. Double composite liners are prescribed for the land disposal of hazardous waste, which is not required for the proposed Class III landfill. See also Responses 0001-25, 0001-33, and 0026-33.

6. This comment references a test leakage rate which assumes a buildup of a one-foot depth of leachate on the liner for a period of 15 years. The proposed liner system includes a leachate collection and removal system which would prevent such a buildup and reduce

the potential for leakage below a level of significance. See also Responses 0001-11, 0001-25, 0001-33, and 0026-33.

7. See Response 0115-6 above. The cited failures are for what is commonly called a dendritic type of leachate collection and removal system. A dendritic system is composed of a series of perforated pipes laid in trenches backfilled with gravel drainrock. The cited types of failures in this comment are the reasons a blanket-type leachate collection system has been selected for the proposed project. This blanket drainage system avoids pipes that may clog.

8. See Responses 0001-8, 15, 18, 25, and 33. See also Responses 0002-4 and 0073-1.

9. Pressure is required to drive either a fluid or a gas/vapor through the proposed landfill cover. The proposed drainage plan is designed to prevent ponding of water necessary to create the pressure needed for water to percolate through the cover. Due to the hot and dry climate at the site, moisture in the refuse can evaporate through the cover material, since water vapor can rise in air. However, much of this water vapor will be extracted with the landfill gas by the proposed gas extraction system and become landfill gas condensate.

10. Fluids will not be introduced into the landfill. See Responses 0001-8, 15, 18, 25, 33, 111, 112, and 116; 0002-4 and 6; and 0073-1.

11. See Response 0115-6, 7, and 9.

12. The reference to the degraded condition at Eagle Mountain pertains to the Eagle Mountain mine area and not the townsite of Eagle Mountain.

13. No tortoises will be transported from the area where they are found, but only moved out of harm's way approximately 300 feet. No tortoises will be euthanized.

14. See Response 0027-82.

15. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

16. Please refer to Response 0033-1.

17. This comment cites a study discussed in the draft EIS/EIR which documents the suitability of the fine tailing material for a soil liner. Sulfate ions are not in themselves hazardous and are common to all dirt, rock, and soil. The material has been tested and there is no evidence that it contains any potentially hazardous material (page 321).

18. The proposed improvements to Eagle Mountain Road are not expected to alter the drainage of the natural washes; rather, drainage will be improved through the use of culverts. Although the jojoba hermaphrodite specimens referred to may be scientifically rare, the species itself is not considered threatened at this time; therefore, impacts to jojoba are not considered significant.

19. Please refer to Response 0027-58.

20. See Response 0027-58.

21. The establishment of recycling centers at existing landfills is discussed on page 107 of the draft EIS/EIR. As with other waste diversion programs, the draft EIS/EIR concludes that there will continue to be a need for additional landfill capacity in southern California even with the full implementation of feasible recycling programs. For this reason, this category of alternatives was not analyzed in detail. Also, see Response 0026-39.

DOCUMENT 0116 Letter from Elisa Aguirre, July 25, 1991

1. See Response 0012-1.

DOCUMENT 0117 Letter from Emily D. P. Nelson, September 17, 1991

1. The impacts of the "Rail Only" alternative are fully discussed in the draft EIS/EIR (see Appendix E, pp. 174-189). This project alternative assumes that the project does not receive waste generated in the nearby area (approximately 4,000 tons/day) which would be directly transported to the project by truck. Therefore, for the "Rail Only" alternative, the maximum amount of waste transported to the site would be 16,000 tons/day rather than 20,000 tons/day. Because the amount of waste transported by rail remains the same as for the proposed project, it is not necessary to increase the number of trains used to transport waste for the "Rail Only" alternative.

2. The comment is unclear. The draft EIS/EIR provides a detailed analysis of the emissions increase associated with truck and rail travel for the Eagle Mountain project and for all the alternatives considered (see Appendix E, pp. 70-210). The net emissions change compared with the "No Project" alternative is presented as well. In addition, a comparison of the relative emissions for trains versus truck hauling, expressed on a common basis of pounds of pollution per 1,000 ton-miles hauled, is contained in Response 0003-5.

3. The relative impacts of the proposed project and of all alternatives, including the "No Project" alternative, are discussed in the draft EIS/EIR separately for the South Coast Air Basin and for the Southeast Desert Air Basin. Figure FEIR-AQ-3 found in Appendix M (Attachment 2) of the final EIS/EIR shows relative impacts of the proposed project with

mitigation and of the "No Project" alternative for the Coachella Valley and the Eagle Mountain area. In addition, Figure FEIR-AQ-2, also found in Appendix M (Attachment 2) of the final EIS/EIR, compares the estimated project emissions from rail and truck travel in the Coachella Valley with estimates of emissions from all sources in the Coachella Valley.

As shown on Figure FEIR-AQ-2, the estimated impacts from the proposed project in the Coachella Valley will result in an increase above the estimated 1991 emissions baseline for the area. The emissions increases are of approximately 3.8 percent for NOx, approximately 0.5 percent for ROGs, and approximately 0.06 percent for PM10 emissions. There are no approved regional air quality models which can be used to perform the analysis requested. Regional photochemical models, such as those used to prepare regional air quality plans, are not suitable for this purpose, because they are insensitive to changes in emissions which are less than five percent of the regional total. The emissions changes associated with the Eagle Mountain project are below this sensitivity threshold in both the South Coast Air Basin and in the Coachella Valley. The analysis in the draft EIS/EIR was performed using the best analytical tools available.

4. The PM10 mitigation measures for the proposed project are discussed in Appendix E (pp. 105-131) of the draft EIS/EIR. Table FEIR-AQ-2 found in Appendix M (Attachment 2) of the final EIS/EIR shows a comparison between the mitigation measures recommended in the Coachella Valley PM10 Plan and those included in the draft EIS/EIR. The table also includes comments explaining why some mitigation measures are not deemed applicable to or not feasible for the Eagle Mountain project.

5. Compliance by the project with the SCAQMD's New Source Review requirements is discussed in the draft EIS/EIR (see Appendix E, pp. 102-105). The need for emissions offsets is discussed in this section as well. Discussions with SCAQMD's Engineering Division staff indicated that emissions offsets will be required for on-site stationary equipment and mobile equipment. District regulations do not require offsets as suggested by the comment.

   Neither CEQA nor NEPA require the provision of emissions offsets, which are emissions reductions calculated in accordance with precise regulatory procedures. Rather, CEQA and NEPA require an accurate assessment of the air quality impacts associated with a proposed project; a determination as to whether the project's impacts are significant; and the use of all practical mitigation measures to reduce significant impacts. Both the draft and the final EIS/EIR comply with these requirements.

6. In general, alternative fuels do not result in inherently lower emission levels. For on-highway vehicles, California's low emission vehicle regulations and the corresponding requirements of SCAQMD Rule 1601 achieve the objectives of what are popularly

referred to as "alternative fuels." While alternative fuels may be used to comply with these regulations, they are not essential, nor do they provide any air quality benefits as compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low emission vehicle programs are discussed in the draft EIS/EIR (Appendix E, pp. 107-108).

For locomotives and landfill equipment, alternative fuels may provide air quality benefits. Appendix E of the draft EIS/EIR discusses the use of alternative fuels (such as methanol, natural gas, or liquefied petroleum gas) as well as electricity for locomotives (pp. 115-117) and for landfill equipment (pp. 120-121). Mitigation Measure AQ-16 states that wherever available, electric versions of landfill equipment such as overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative-fuel technology will be used depending on air permitting standards. Electrification of this equipment would reduce the emissions associated with landfill equipment by approximately five percent. The actual emissions reductions associated with these measures are shown in Table FEIR-AQ-4 (Appendix M, Attachment 2 of the final EIS/EIR).

Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from Eagle Mountain railway locomotives. The revised Mitigation Measure AQ-9 includes a specific timetable for conducting the feasibility study. A comparison of the emissions from the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M).

No quantification of air quality benefits from the use of alternative fuels in landfill equipment is possible at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used in the Eagle Mountain project.

Electrification of the 52-mile stretch of track between Ferrum Junction and the landfill site was discussed in the draft EIS/EIR as potentially feasible. Mitigation Measure AQ-10 requires the preparation of a feasibility analysis of electrification at such time as there is sufficient landfill gas. Table FEIR-AQ-5 found in Appendix M (Attachment 2) of the final EIS/EIR shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

7. As stated above, Table FEIR-AQ-5 shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible. Electrification of the Eagle Mountain rail line is not considered feasible at this time because of the steep grades and several major turns in the rail line (page 386 of the draft EIS/EIR). Also, the costs and physical disturbance necessary for

the installation of the catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures. The electrification of the Eagle Mountain railway will be evaluated when sufficient landfill gas is generated to provide the required electrical energy.

Electrification of the Southern Pacific main line was not evaluated as a mitigation measure because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. While at the present time both the California Air Resources Board and the South Coast AQMD are exploring ways to reduce locomotive emissions, including options for electrification of the Southern Pacific main line, the effects of such potential regulations are at this time considered remote and speculative.

8. The risk assessment has been revised to reflect the use of on-site meteorological data and updated unit risk values. The worst-case cancer risk is estimated to be 2.2 in a million. The most probable cancer risk is estimated to be 1.0 in a million. South Coast Air Quality Management District Rule 1401 provides that a project may be approved, if the project uses best available control technology for toxics and the cancer risk does not exceed 10 in one million.

With respect to the request to estimate the regional population exposure to carcinogenic emissions from transport vehicles, it is expected that the trains and trucks will emit compounds that are considered cancer-causing (e.g., polycyclic aromatic hydrocarbons, formaldehyde, and heavy metals). However, the analytical tools have not been developed to assess long-term regional health impacts to large populations from intermittent line sources, such as railroads and highways. The models used to predict long-term impacts from stationary sources (e.g., ISCST, COMPLEX1, SHORTZ) do not handle short-term transient emissions, such as the emissions from a train passing a given receptor for a few minutes several times per day. The results of acceptable models for line sources (e.g., CALINE) are highly dependent on wind conditions, which vary greatly over the large distances that trains and trucks may travel. Puff models (e.g., INPUFF) used to analyze short-term releases (over a few seconds or minutes) are best suited for accidental release situations. For predictions of long-term risks, their reliability is suspect. Therefore, the available dispersion models cannot be expected to predict reliably the long-term impacts from line sources on a regional basis.

Since the draft EIS/EIR discusses the most likely worst-case risk associated with the proposed project (based on a screening analysis) and since mitigation measures have been proposed to address this risk (in the form of additional analysis and ultimate denial of the project if unacceptable health risks remain after mitigation), no further changes in this discussion in the draft EIS/EIR are deemed necessary.

9. The health risk assessment has been revised, as described in Attachment 9 in Appendix M of the final EIS/EIR, to reflect on-site meteorological data and updated unit risk values. As stipulated by the Air Toxics Act (AB 2588), if the district determines that the emissions pose a significant health risk, the facility operator will have to provide notice to all exposed individuals regarding the results of the assessment.

10. The screening level/risk assessment discussed in the draft EIS/EIR was prepared in accordance with the CAPCOA Guidelines that provide directions on such initial assessments. As discussed in the previous response, a revised risk assessment has been prepared. In response to several comments on the draft EIS/EIR, the revised assessment clarifies the earlier work by providing a better description of the data on which the emission estimates were based and the procedures used in the assessment. Furthermore, the revised assessment adds a discussion of the potential chronic non-cancer health impacts, which were found to be at acceptable levels. See Response 0115-8 above.

DOCUMENT 0118 Letter from FIT (future-in-trouble) Environment, September 24, 1991

1. The comment is not clear. Mitigation measures for the proposed project are fully discussed in the draft EIS/EIR (see Appendix E, pp. 105-131).

2. See Responses 0001-4, 5, 7, 8, 10, 15, 18, 25, 33, 111, and 112 and 0002-4 and 6.

3. The potential for vectors and associated diseases generated by the proposed project would be reduced by implementing mitigation measures included in the project design. These measures are described on pages 345-346 of the draft EIS/EIR.

4. See Responses 0001-21, 22, 23, 24, 111, 112, 114, 115, and 116.

5. See Responses 0001-4, 5, 7, 8, 10, 15, 18, 25, 33, 111, and 112 and 0002-4 and 6.

6. See Response 0118-1.

7. Please refer to Response 0026-3. In addition, as part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers to supplement Southern Pacific workers and to accomplish trash pickup as necessary. This provision, in conjunction with existing response plans, would provide adequate mitigation for the potential increase in accidents.

8. See Response 0001-97.

9. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

10. Please refer to Response 0026-10 for a discussion of measures to minimize windblown debris resulting from the proposed project.

11. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

12. The expenditure of the approximately $30 million per year host community fees given to Riverside County will be dictated by the County of Riverside. MRC will have no voice in the nature of the expenditures.

13. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

14. Funds collected as the host community fees will be expended upon the authority of Riverside County in ways which the County deems appropriate. The expenditure of funds set aside as a contingency against potential environmental cleanup will be administered by the agency having jurisdiction over the cleanup process.

DOCUMENT 0119 Letter from Grace Jablow, September 12, 1991

1. See Response 0021-9.

2. See Response 0059-3.

3. "First-rate" tortoise habitat will not be destroyed. Also, see Responses 0027-79 and 80.

4. See Responses 0001-4, 5, 7, 8, 10, 15, 18, 25, 33, 111, and 112 and 0002-4 and 6.

5. See Response 0002-23.

6. The comment is only partially correct. As discussed in the draft EIS/EIR (Appendix E, pp. 204-210), a comparison between the "No Project" alternative and the proposed project with mitigation shows that the proposed project with mitigation would result in a decrease in emissions in the South Coast Air Basin for all pollutants, except for NOx emissions.

DOCUMENT 0120 Letter from California Certified Organic Farmers, September 24, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0121 Letter from LaVonne Rittenhouse, September 11, 1991

1. Please see Response 0001-25.

2. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

3. Traffic and air quality impacts of the proposed project are discussed in the draft EIS/EIR (Sections IV.C. and IV.D., respectively). Please see Responses 0017-10 and 0026-8 for a summary of project-related traffic and air quality impacts.

4. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

5. Please refer to Response 0006-1 for a discussion of mandatory regional recycling programs.

DOCUMENT 0122 Letter from Frances McCall Pearson, September 13, 1991

1. Please refer to Response 0003-40.

2. No quantification of air quality benefits derived from the use of alternative fuels in locomotives is possible at this time because no alternative-fueled locomotive engines are commercially available at this time. Thus, it is not possible to compare emission impacts and/or benefits from the use of alternative fuels with the mitigation measures listed in the draft EIS/EIR.

   The feasibility of railway electrification is discussed in Appendix E (pp. 116-117) for the 52-mile stretch of track between Ferrum Junction and the landfill site. Electrification of the Eagle Mountain rail line is not considered feasible at this time because of the steep grades and several major turns in the rail line (page 386 of the draft EIS/EIR). Also, the costs and physical disturbance necessary for the installation of the catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures (AQ-10). The electrification of the Eagle Mountain railway will be evaluated when sufficient landfill gas is generated to provide the required electrical energy. Table FEIR-AQ-5 (Appendix

M, Attachment 2 of the final EIS/EIR) shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

Electrification of the Southern Pacific main line was not evaluated as a mitigation measure because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. While at the present time both the California Air Resources Board and the South Coast AQMD are exploring ways to reduce locomotive emissions, including options for electrification of the Southern Pacific main line, the effects of such potential regulations are at this time considered remote and speculative.

3. See Response 0007-3.

4. It is unclear if the comment is referring to a waste-to-energy program through incineration of the refuse or the generation of energy through the process of recovering landfill gas resulting from decomposition of landfill material. The feasibility of a waste-to-energy program is addressed in Response 0026-75. The recovery of energy from landfill gas, though highly speculative, is discussed in Section IV.O. of the draft EIS/EIR. See also Response 0001-32.

DOCUMENT 0123 Letter from Kristy Baker, September 2, 1991

1. The issues raised in this comment do not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

2. The draft EIS/EIR does address landfills in counties where waste is generated (page 105). Other potential sites in these areas were not analyzed in further detail because of their limited capacities and because adequate information is not currently available regarding the description of projects at these sites.

3. Please refer to Response 0006-1 for a discussion of regional mandatory recycling programs.

4. The content of this comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

5. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

6. For a discussion of regional recycling legislation, please refer to Response 0006-1.

7. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

8. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

9. The proposed landfill would be a Class III nonhazardous municipal solid waste facility and as such would only accept nonhazardous solid wastes and inert wastes. Any hazardous waste encountered in the waste stream during the mandatory screening process at the MRFs would be removed and transported to a licensed hazardous waste facility by licensed hazardous waste carriers. Hazardous wastes would not be permanently stored on-site.

10. For a discussion of the liner characteristics and potential for decay, please refer to Responses 0001-10 and 0002-4. All refuse transported to the site will be screened to detect the presence of radioactive materials. A description of the process is provided on page 332 of the draft EIS/EIR (also see Response 0021-15). This process will eliminate the potential for any radioactive contamination to the area.

11. The draft EIS/EIR includes a discussion of transport of air pollutants from one basin to another (see Appendix E, pp. 46-50).

12. Project impacts to biological resources are discussed on pages 446-470 of the draft EIS/EIR.

13. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

14. Impacts from rail operations and at-grade crossings associated with the proposed project are considered insignificant (see Section IV.C.1 and IV.C.2 of the draft EIS/EIR). See Response 0026-3 for a discussion of the emergency response plans for potential rail accidents involving solid waste. Also, operators and haulers are required to carry liability insurance against accidents. MRC will fund additional adequate insurance for the cleanup and environmental response to potential accidental spills.

15. The proposed landfill would be a Class III nonhazardous municipal solid waste facility and as such would only accept nonhazardous solid wastes and inert wastes. In the event that hazardous materials illegally enter the waste stream, the transfer stations would provide methods to detect, collect, temporarily store, and transport the unacceptable material to a licensed hazardous waste facility. Details of the screening process at a typical transfer station is provided in the draft EIS/EIR (pages 48-49 and 331-332). See Response 0002-8 for more details of this process.

16. The content of this comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

17. See Response 0110-16.

18. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

19. Please refer to Response 0006-1 for a discussion of mandatory recycling programs.

20. The purchase of dedicated open space land to compensate for impacts to habitats from development is one option available to the BLM. This option has been chosen to compensate for the loss of low-quality (Category III) tortoise habitat due to construction of Eagle Mountain Road.

21. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

DOCUMENT 0124 Letter from B. T. Morring, October 9, 1991

1. This letter expresses support for the project and for the EIS/EIR. No response is necessary.

DOCUMENT 0125 Letter from Riverside County Fire Department, May 13, 1990

1. See Response 0001-128.

2a. This comment is correct. Fires do occur along the rail right-of-way throughout Riverside County. The existing records of accidents along the Eagle Mountain rail line for the 1957-1985 time period were used to generate the discussion on right-of-way fires (page 341 of the draft EIS/EIR). During those 28 years, four fires destroyed wood trestles along the roadbed. Those destroyed trestles were either rebuilt in steel or replaced by culverts and earth fills. The fires were attributed to sparks from hot ore and car brake shoes, to arson, and to an incendiary military air strike. The mitigation for potential right-of-way fires is a vegetation/weed abatement policy along the public and private rail line. The Riverside County Fire Department will continue to provide emergency service to the roads and freeways that will be used by the vehicles serving the project.

2b. Please refer to Response 0001-128.

3. Please refer to Response 0001-128.

4. Please refer to Response 0001-128.

5. This comment is correct. As outlined in Section IV.K. of the draft EIS/EIR, the mitigation measures listed on page 533 would be required to reduce the fire protection impacts to below a level of significance. The specific measure related to this comment includes the installation of water mains and fire hydrants that provide the required flows pursuant to an improvement plan approved by the fire department.

6. The facilities permit would include the conditions of approval presented in this comment.

DOCUMENT 0126 Letter from County of Riverside Transportation Department, September 17, 1991

1. The map exhibit in Specific Plan 252 referred to in this comment will be revised as requested.

2. The map exhibits in Specific Plan 252 referred to in this comment will be revised as requested.

3. The two typical cross sections in Specific Plan 252 referred to in this comment will be revised as requested.

4. The mitigation for degradation of County-maintained street surfaces used by the proposed project's truck traffic will be funded by MRC on a fair-share basis. See page 365 of the draft EIS/EIR.

5. If, in the future, San Diego County or a location in Arizona intend to use the Eagle Mountain landfill, a separate environmental document would be required to identify potential impacts, including traffic.

6. See Response 0126-5 above.

DOCUMENT 0127 Letter from Alice and Fred Lloyd, received September 23, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0128 Letter from Patricia Weissleader, received September 23, 1991

1. The refuse will be transported by rail in intermodal shipping containers. The characteristics of these containers would prevent leakage or odors (see Response 0021-25).

Loaded containers, under normal operations, may await switching at Ferrum Junction for two to six hours, possibly up to one day. At that time, if refuse-laden trains cannot be moved to the project site for off-loading, they will be returned to the point of origin for disposal at alternate locations. The shipment of waste via Ferrum Junction will depend upon the entire rail right-of-way being available for use. Potential odor impacts occurring during rail transport of refuse are addressed in Response 0001-97.

2. The landfill gas recovery system is described in the draft EIS/EIR (pp. 70-73, 334-338). The landfill will incorporate a landfill gas recovery system from its inception. This system will be expanded as the landfill is expanded. Operation of the LFG recovery system, including the flare, will depend upon the rate at which methane gas is generated. These requirements are contained within the SCAQMD Rule 1150.1.

3. The Eagle Mountain project does not propose to participate directly in waste diversion programs or activities. Instead the proposed project will only enforce compliance indirectly with MRF operators for the removal of recyclables (and hazardous waste) through the mechanism of not accepting residual waste unless the recyclables and hazardous wastes have been removed. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with authority of the Local Enforcement Agency. The load-checking program for refuse destined for Eagle Mountain is described in Response 0111-43.

4. See Response 0001-10 and 11.

5. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a low-permeability soil layer and a high density polyethylene flexible membrane will be placed over the entire area underlying refuse. A more detailed description of this liner is provided in Response 0002-4 and in Section II.B.1 of the final EIS/EIR.

6. See Response 0001-10 and 0128-5.

7. See Response 0002-22.

8. The draft EIS/EIR indicates that no significant environmental degradation of water resources will occur, so the development of a contingency land purchase policy is not required. Also see Response 0111-12.

9. All available data for groundwater levels have been collected and used in analysis for the proposed project. This information covers approximately the past 40 years. Since 1988, a comprehensive look at wells and boreholes has been conducted. See Responses 0002-5, 6, and 7 for further details.

10. The areas involved in the land exchange were chosen by BLM. MRC would acquire land adjacent to the landfill from BLM (see Figure 4 of the draft EIS/EIR). However, these lands will be placed in permanent open space in the Specific Plan and, as such, will serve to protect sensitive wildlife species including the bighorn sheep. In exchange, BLM will receive lands of prime habitat for the desert tortoise. The land exchange will also contribute to the establishment of a 20,000-acre nature preserve for other endangered, threatened, or sensitive species.

11. The draft EIS/EIR evaluated in detail seven alternative sites to the proposed project (Section II.G., Analysis of Alternative Sites, page 77). Impacts associated with each of these alternatives is included. Five additional sites were considered but eliminated from detailed analysis (page 105 of the draft EIS/EIR). Additionally, with respect to potential groundwater contamination, please refer to Response 0001-25.

12. See Response 0128-1 above.

13. To address prehistoric or historic sites which could be affected by the proposed project, a complete cultural resource survey was performed within the proposed project area—Eagle Mountain Mine including the BLM exchange lands, road and rail ways, and Kaiser exchange lands. Although several isolates were discovered and subsequently recorded, no historic sites were located within the project area. Although historic sites exist within the vicinity of the proposed project, the proposed project is not anticipated to directly impact areas outside of the project boundaries. Therefore, neither prehistoric nor historic resources were addressed outside of the project area as defined.

DOCUMENT 0129 Letter from Peter F. Richardson, September 20, 1991

1. MRC has proposed that truck traffic to the project site will be reduced from 200 to to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100) in three years. This would account for total traffic on Eagle Mountain Road and its extension of up to 285 daily trips. This is not considered a significant traffic impact. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck traffic.

2. There will be no rail transport of hazardous waste. The Eagle Mountain facility will be a Class III landfill which will admit municipal solid wastes only; that is, the residential and commercial solid wastes normally generated within a community. Any small amounts of wastes considered "hazardous" which may enter the municipal waste stream (toxic, corrosive, or flammable materials) would have been removed at the MRFs prior to the waste being transported to the landfill. The elimination of hazardous wastes from municipal refuse depends on compliance by the public with applicable regulations. Community efforts to provide residents a convenient way of disposing small quantities

of hazardous household materials (batteries, empty paint cans, etc.) would further reduce the amount of hazardous materials entering the municipal solid waste stream. Finally, an Emergency Response Plan for Southern Pacific Railway is on file with the local administering agencies including the health department of San Bernardino and Riverside counties. See Response 0026-3 for more details.

3. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

4. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

5. The proposed project is a Class III municipal solid waste facility and as such would not transport or landfill any hazardous materials. See Response 0001-117.

DOCUMENT 0130 Letter from Sandra R. Hill, September 18, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

DOCUMENT 0131 Letter from Myrt Griffin, September 18, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

DOCUMENT 0132 Letter from City of Buena Park, September 23, 1991

1. See Response 0015-2.

2. See Response 0015-2.

3. See Response 0015-2.

4. To avoid peak-hour traffic, an agreement was made between Southern Pacific Transportation Company (SPTC) and MRC that would allow trains operations to be scheduled during the evening, nighttime, and early morning hours. MRC has indicated their committment to operating under this constraint and SPTC has confirmed that such a schedule is entirely feasible given the current rail traffic intensity. SPTC also indicated that there are currently no other known projects that would result in increased rail traffic requiring rescheduling traffic to daytime hours.

5. The source of the Beach Boulevard traffic volume cited in the report was data provided by the Public Utilities Commission (PUC). The conservative estimate of average traffic (4 percent of the daily traffic) during any scheduled hours of operation more than offsets the increased daily traffic volume figures cited in the comment letter. Review of data cited in the 1985 Highway Capacity Manual regarding temporal variations in traffic suggest that the actual average hourly volume between 7 P.M. and 7 A.M. is typically in the range of 2.0 to 2.5 percent of average daily traffic. The analysis in the draft EIS/EIR assumes that 4 percent of 34,000 vehicles, or 1,360 vehicles will arrive during the average hours of rail operations. This figure is still larger than the product of 2.5 percent times 48,000 vehicles (1,200 vehicles).

6. The rail operations associated with the proposed project would not affect the peak-hour traffic in the city of Buena Park. Please refer to Response 0132-4 above.

7. The traffic arrival rate included in the analysis implicitly includes any traffic using the I-5 ramps at Beach Boulevard at the railroad crossing. The number of vehicles delayed at the crossing is presented in the traffic analysis (Appendix D of the draft EIS/EIR), and the I-5 ramps are sufficiently distant from the crossing that no blockage of the ramps is expected.

8. Section IV.C.2 of the draft EIS/EIR describes impact to at-grade crossings affected by the proposed project. Throughout the entire transportation system, a total of approximately 78 hours of delay is expected on an average daily basis to vehicles encountering refuse unit trains when using at-grade crossings. Most of this delay would occur on the rail segment servicing northern Orange County, where a combination of existing high traffic volumes and low train speeds result in much higher delays than along other rail segments. To minimize traffic conflicts, trains would be scheduled to begin their runs starting from the western or southernmost transfer station very late at night (approximately 11:30 P.M.). See Response 0132-4 above. The impacts of the proposed action to at-grade crossings are considered not significant, and thus, no mitigation is necessary.

DOCUMENT 0133 Letter from Malvin W. Bailey, Sr., September 11, 1991

1. See Responses 0001-25 and 0001-33.

2. The Rail Access Only alternative would eliminate truck transport of solid waste to the landfill site. Project impacts from the Rail Access Only alternative are described for each issue in the draft EIS/EIR. Additionally, subsequent to the preparation of the draft EIS/EIR, the project has been revised to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This modification in the project description is discussed in Section II.B.2 of the final EIS/EIR.

3. See Responses 0006-1 and 0111-31.

DOCUMENT 0134 Letter from Bernard J. McKean, September 14, 1991

1. Due to the dry conditions of the waste that will be disposed at Eagle Mountain, the dry climatic conditions, the composite liner over the entire landfill area, the leachate collection system, and the LFG monitoring wells, the leakage of leachate and subsequent degradation of groundwater is considered minimal, if nonexistent. Financial assurance for the cleanup of a leak must be completed as part of the permitting process even though leachate is not expected to leak through the landfill containment system.

DOCUMENT 0135 Letter from Michael J. Bules, September 17, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no further response is necessary.

DOCUMENT 0136 Letter from City of La Verne, September 18, 1991

1. The draft EIS/EIR does not refer to noise levels wihin 350 feet of the railway, so it is not clear what this comment refers to. However, noise measurements were taken for land uses within 100 feet of the corridor of the Southern Pacific rail line. It was determined that the addition of the project-generated train traffic to the existing train traffic would slightly increase (+0.7 dB) noise levels along the rail corridor. This increase that would be experienced by residential areas 100 feet from the Southern Pacific rail line is not considered significant because it is not discernible by humans. It should be noted that existing noise levels within 100 feet of the rail line corridor are 74 CNEL, which exceeds acceptable noise levels for residential uses. Also, see Response 0001-103.

2. See Response 0136-1 above. This comment appears to refer to a statement in the noise technical report:

   > There may be some undeveloped areas designated as residential that are adjacent to roadways that will carry project related traffic [which] may have homes built on them in the future. If these homes are planned within the roadway 65 CNEL contour line, mitigation measures may be required. More detailed calculations should be performed when a land use map that identifies the noise sensitive land uses around the Eagle Mountain Landfill site and along the rail and truck haul routes becomes available (page 15).

   The City of LaVerne site referred to in the noise report is a hypothetical loading station site. No plans for developing such a site exist, nor are any such plans included in the

Eagle Mountain landfill project. Therefore, sound-attenuating walls would not be appropriate at this time, nor can any additional information be developed until some specific proposal is planned.

3. The refuse transported by rail or truck would be contained in closed intermodal containers, 40 × 8 × 8 feet in size. Standard intermodal containers are not sealed in the sense that they are watertight. The rear closure is a tightly fitting latched door that will prevent the escape of refuse. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged.

4. The refuse will be transported in closed intermodal containers to reduce windblown debris and odor impacts. See Response 0136-3 above.

5. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subject to an inspection program for the removal of recyclables and hazardous materials. If refuse does not comply, it will not be accepted by Eagle Mountain. It should be noted that the County may accept refuse which has not been processed by a MRF at Eagle Mountain under emergency circumstances only.

6. As required by the state Health and Safety Code (Division 20, Chapter 6.95), Southern Pacific's Emergency Response Plan, Spill Prevention Control Contingency Plan, and Tier II Chemical Inventory Forms are filed every year with all administering agencies, including the health departments of Riverside and San Bernardino counties and the California Public Utilities Commission. In addition, General Order 161 of the California Public Utilities Commission (effective 8/7/91) requires Southern Pacific to file the emergency response plan, traffic density data by line segment, lease and storage inventories, and a list of 24-hour emergency contact telephone numbers with any emergency response agency (such as fire departments) within 60 days of receiving a written request from the agency.

   Neither Title 14, Chapter 3, of the California Code of Regulations (Minimum Standards for Solid Waste Hauling and Disposal) nor Title 40, Part 241, of the Code of Federal Regulations (Guidelines for the Land Disposal of Solid Wastes) require MRC to file an emergency response plan. The procedures outlined in Section 241.211-3 of the CFR (Recommended Safety Procedures for [Landfill] Operations) have been incorporated already in the safety program discussed on pages 147 and 352 of the draft EIS/EIR.

7. See Response 0015-2.

DOCUMENT 0137 Letter from Patricia Aikin, received September 18, 1991

1. At the two existing crossings of the railroad, Eagle Mountain Road Extension and Kaiser Road, railroad crossing signs are presently located at the side of the road. Flashing lights will be installed where the railroad crosses Kaiser Road (draft EIS/EIR, page 360). A two-way stop will also be installed at this intersection for Kaiser Road's intersection with Eagle Mountain Road Extension (draft EIS/EIR, page 365). No change will take place at the existing Eagle Mountain Road railroad crossing.

2. Subsequent to the preparation of the draft EIS/EIR, the project has been revised to reduce truck traffic to the project site from 200 to 100 round-trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). See Section II.B.2 of the final EIS/EIR for a discussion of this project modification. An overpass is not deemed necessary.

3. As described on page 50 of the draft EIS/EIR, the unit trains serving the landfill would consist of one or more locomotives carrying up to 14 railcars. Each train would be less than 4,000 feet long and carry approximately 3,500 tons of refuse. This length is somewhat shorter than most main line trains and approximately the same length as the trains previously used by Kaiser. The trainloads of solid waste material would be considerably lighter than those which transported iron ore during the former mining operations. The present track alignment for the Eagle Mountain rail line consists of heavy-gauge track which was originally installed to accommodate the heavy loads transported for mining operations and is considered more than adequate to bear the loads of the unit trains serving the landfill. In the event of derailment, the potential for a runaway train to occur would be minimal. Unlike the mining operations, which transported the loaded trains downhill, the full trains en route to the landfill would be traveling uphill. If derailment occurs while transporting the refuse uphill, the train's ability to stop would be far greater than if the full load were going downhill.

4. This comment is inaccurate. The existing train noise levels along the rail line were established in terms of the CNEL index by modeling the railroad for the current operations. To determine train noise levels at various distances, the Wyle model was used. See page 7 of Appendix H of the draft EIS/EIR. An overview of the analytical approach used in the air quality report may be found on pages 59-70 of Appendix E of the draft EIS/EIR.

5. Please refer to Response 0021-7.

6. The emergency response plans would be enacted upon interruption of rail service due to a rail accident, rail strike, or other catastrophic occurrence. The basic components of the plan are discussed in Response 0026-3. For instance, in case of rail accidents, the train

crew will immediately notify the local fire and police departments as well as the STO (Supervisor, Train Operations) by the quickest means available. The crew will provide information on the specific location of the accident; the condition of the car(s); the location of people, property, or public systems (roads, power lines, etc.) which could be subject to damage; the location and condition of access roads to the accident site; and wind and weather conditions. While awaiting fire and police personnel, the train crew will assist in keeping people away from the emergency area and remain at the scene until relieved by a railway company operating officer, who will then coordinate the actions of the emergency response team.

Furthermore, Kaiser Road may not be used by refuse truck traffic for any reason.

7. Refer to Response 0102-84 for information regarding accidents on the Southern Pacific railway and Response 0026-3 for a discussion of the required emergency response by Southern Pacific in case of an accident.

8. See Response 0111-61.

9. To reduce diesel fuel consumption, MRC shall purchase and operate the electric version of landfill equipment including overhead cranes, crushers, conveyors, and pugmills wherever available. Where not available, alternative-fuel technology will be used depending on air permitting standards (Mitigation Measure AQ-16). Electrification of the Eagle Mountain railway is not considered feasible at this time (see page 386 of the draft EIS/EIR and Responses 0117-6 and 7). The project design includes measures to recover energy from landfill gas generated from the proposed project. When landfill gas generation is sufficient to warrant the construction of an energy recovery facility at the project site, MRC shall prepare, or have prepared, a study of the cost/effectiveness of electrifying the Eagle Mountain railway. Numerous alternatives to the use of diesel fuel are discussed in the draft EIS/EIR (pages 385-386); however, these measures are not considered to be feasible at the present time.

10. The proposed project would utilize rail lines to transport refuse to the Eagle Mountain landfill. Other uses of the rail line including commuter service between the desert and coast communities are not a part of this project. Scheduling of the trains with Southern Pacific will occur on a contractual basis to prevent any conflict between ongoing rail operations and trains being utilized for the landfill project. Any future projects which utilize the rail lines would undoubtedly be subject to the same scheduling coordination.

DOCUMENT 0138 Letter from Palo Verde Resource Conservation District (PVRCD), October 1, 1991

1. Please refer to Responses 0001-18, 25, 28, 33, and 34.

2. Please refer to Responses 0001-36 and 39.

3. This comment is correct. Diversion of drainage flows will require a combination of channels and/or dikes. The selection and sizing of the required facility will be in accordance with approved hydraulic analysis.

4. As stated in subsection b., soils, on page 248, of the draft EIS/EIR over much of the landfill footprint the top five feet of the soil profile is occupied by artificial fill. This material consists of overburden deposits removed by the prior mining activity. As described, the overburden rocks range up to about five feet in diameter.

5. While the liner is a very important component of the project, its design and performance standards, as well as inspection, testing, and monitoring procedures to ensure its performance, are prescribed by state and federal law. The draft EIS/EIR also discusses the liner on pages 320-322 and Appendix B, pages 20-21. Information in the final EIS/EIR (Section II.B.1) amplify the description of the liner design, but this information does not alter any of the conclusions of the report.

6. Monitoring wells will be installed prior to the start of operations.

7. See Response 0166-1.

DOCUMENT 0139 Letter from Waste Management of North America, Inc., September 23, 1991

1. The position of the BLM is to support the land exchange and updates of the rights-of-way, as proposed. While BLM has no regulatory position or preference regarding the actual landfill itself, BLM is not opposed to the project assuming that it meets all other regulatory requirements.

   This is a privately sponsored project. The role of the County of Riverside, therefore, is to decide to approve the project with appropriate conditions or to deny the project. This fundamental decision has not yet been made. Therefore, the county has not identified a preference among the alternatives presented in the draft EIS/EIR. However, under the CEQA Guidelines [14 CCR Section 15126(d)] the County is required to identify an environmentally superior alternative to the proposed project. For this purpose, the County identifies the Reduced Landfill alternative.

   With respect to mitigating significant effects, the summary identifies the mitigation measures for all topics, including air quality (see Table S-2 of the draft EIS/EIR). The summary also states that impacts in all areas except air quality can be mitigated. If the county chooses to approve the project, appropriate findings will have to be made by the Board of Supervisors to support the approval.

2. All sources were referenced. Much of the text in the draft EIS/EIR is based on material found in the Appendixes, where additional references are provided. For the one specific example cited (from page 335), the assumptions are based on the experience of SCS Engineers, who helped prepare the discussion, and are clearly stated. Furthermore, the discussion cautions the reader of the uncertain nature of such projections.

3. The deposition of fill into jurisdictional waters of the U.S. (regulated by the Army Corps of Engineers) will occur from the proposed landfill project. Jurisdictional waters are typically defined by the boundary of the ordinary high water mark of the drainage and also include any adjacent wetlands. Jurisdictional waters may or may not contain wetland habitat depending on the presence of three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. With the exception of Salt Creek near the train trestle, the other desert washes and drainages within the bounds of the project, including those within the landfill footprint, would be considered jurisdictional waters, but not classified as wetlands since they lack hydric soils and hydrophytic vegetation.

4. For the only faults actually crossing the project area, the draft EIS/EIR states that the displacement predates Quaternary alluvium (page 249). Additional information regarding faulting is provided in Responses 0001-21 and 0002-11.

   40 CFR 258.13 and 23 CCR Section 2533(d) both require a 200-foot setback from a Holocene fault. Sections 2533(d,e) require a demonstration that the landfill containment structures are designed to withstand ground accelerations associated with the maximum credible earthquake and rapid geologic change. The Eagle Mountain landfill is not located on or within 200 feet of any Holocene faults.

5. See Responses 0001-21 and 0002-11. The landfill design will comply with the new federal landfill regulations contained in 40 CFR 257-258, which were adopted after the draft EIS/EIR was published.

   40 CFR 258.14 defines a seismic impact zone as an area where the maximum ground acceleration will exceed 0.10 g in 250 years. This is virtually everywhere in California, which is why Chapter 15 of the California Code of Regulations requires landfills to be designed to withstand the ground acceleration associated with earthquakes.

   The unstable area requirement in 40 CFR 258.15 is also related to the requirements of Section 2533 (d,e).

The Eagle Mountain landfill will be designed in conformance with California regulations for faulting, seismicity, and geologic change. See Response 0026-82.

6. The comment is correct in stating that the project must comply with the State Implementation Plan (SIP). The comment is not correct in stating that the identification of a significant impact precludes this compliance. The text of the EIS/EIR reviews various criteria for assessing significance, and the air quality appendix reviews these in more detail. The project must comply with applicable plans, regulations, and procedures. Given some of the evaluation criteria in use for air quality analyses, however, compliance with an SIP does not guarantee a determination that impacts have been reduced below thresholds used to define significance.

7. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a low-permeability soil layer and a high density polyethylene flexible membrane will be placed over the entire area underlying refuse. See Response 0002-4.

8. A formalized closure and post-closure maintenance plan will be submitted to the RWQCB within 180 days of the termination of each area's phase of waste disposal, according to Title 23, CCR Section 2597. A final plan of the engineering design and a final basis of operation will be submitted at that time.

   A detailed description of the proposed groundwater monitoring system is described in the draft EIS/EIR (pages 46, 59-60, 73, 104, 121, 124, 127, 132, and 322-323). All groundwater monitoring of existing and new wells will be conducted quarterly and throughout the life of the landfill. Water samples will be tested for levels of constituents as set by the RWQCB. Water level measurements and water quality analysis will be reported on a quarterly basis as set by Title 23, CCR Sections 2555 and 2559.

   MRC will be responsible for all aspects of post-closure monitoring and controls. The closure and post-closure costs will be formatted according to Title 14 of the California Code of Regulations and will include a letter of credit which is a demonstration of financial responsibility for closure and post-closure costs and a financial assurance test and guarantee demonstrating responsibility for closure of the site.

9. The rationale for the selection of a reduced landfill operations alternative can be found on page 74 of the draft EIS/EIR. This alternative considers a 20 percent reduction in the daily capacity of the landfill. This amounts to a 50 percent reduction of truck haulage, the minimum amount necessary to adequately serve the desert area needs. The daily reduction of the rail haulage amounts to approximately 12 percent, or slightly less than one train. The rationale used to reduce the landfill footprint is based on the sequencing of the project. The area to be filled in the last sequence would not be filled to avoid the mineral resources in the east end of the East Pit and to address the public's concerns

about groundwater. Because both the SCAB and SEDAB are nonattainment air basins and the aquifer is in overdraft, no reduction in daily operations would reduce the unmitigated significant air impact and cumulative water use impact of the proposed action to below a level of significance. All other potential environmental impacts of the proposed action can be reduced below a level of significance by project design and mitigation. Further reduction in the project operations does not substantially reduce potential environmental impacts. In addition, the virtually unlimited potential size variations of this alternative are limited by a "rule of reason" under both CEQA and NEPA.

10. As suggested in this comment, this response acknowledges that the words "until a site near Amboy is identified" found on page 81 of the draft EIS/EIR should be deleted. Figures 31 and 32 of the draft EIS/EIR identify the location of the proposed Amboy site.

11. As suggested in this comment, this response acknowledges that the third sentence of the last paragraph on page 81 of the draft EIS/EIR should be deleted.

12. The information in this comment is accepted at face value. This response acknowledges that the fifth and sixth sentences of the second paragraph on page 84 of the draft EIS/EIR should be deleted.

13. As suggested in this comment, on page 84, third paragraph, of the draft EIS/EIR, the following information is reflected as part of the final EIS/EIR. It should be noted that Class III desert tortoise habitat may include areas which have historically contained tortoises but currently support human-related activities (e.g., mining, off-highway vehicles, agriculture, etc.).

    Studies conducted by the Bureau of Land Management as part of the EIS for the California Desert Conservation Area Plan (1980) indicate that there are no rare or endangered species (plant or animal) on or near the site. Additional environmental studies verify this conclusion. A full assessment of biological resource impacts will be provided in the Amboy EIS/EIR.

14. Based on this comment, this response acknowledges the revision to the discussion of cultural resources near the Amboy site (page 84, fourth paragraph of the draft EIS/EIR). The discussion should read: "The Amboy project will avoid any significant cultural resources and sites within the project boundaries."

15. While housing may be available in Twentynine Palms, this community is 40 miles southwest of the Amboy project site.

16. This comment agrees with the draft EIS/EIR, "the applicant [Amboy] will be required to provide sufficient water and storage to meet fire flow requirements (p. 85)."

17. This comment is correct. Page 85, third paragraph, of the draft EIS/EIR should read: "The Amboy project will not limit access to mineral resources (i.e., nearby salt production facilities)."

18. Using the same criteria for both projects, virtually any increases in air emissions in the SCAB or the SEDAB will result in a significant air impact because both basins are nonattainment air basins (see Response 0026-8). While general, this conclusion is not at all speculative given the quantity of emissions associated with such rail haul proposals. It is a function of the relatively low thresholds of significance, which are reviewed in the draft EIS/EIR (pages 368-369). The statement on page 85 of the draft EIS/EIR refers to the *proportionate* distribution of the air emissions. The statement on page 86 refers to the quantity of rail emissions: "rail emissions may be slightly less for Amboy than for the proposed Eagle Mountain project."

19. This comment is speculative. The grades and structure of the Kaiser rail line were designed to handle ore trains (see Responses 0017-6 and 9). Estimates of rail air emissions were based on fuel consumption projections, which did account for grades along various segments of the rail line.

    The discussion of the Amboy project was included as an alternative in response to input during the scoping process and as part of the draft's discussion of alternative sites as required by CEQA. The above responses to this commenter's comments have resulted in a more accurate project description of the Amboy project. The similarity of the two projects leads to the similarity of the conclusions regarding their impacts and need for mitigation measures. There are certainly specific features that differentiate the projects, but the environmental data do not indicate a decisive advantage of one over the other.

20. The total estimate of waste capacity of 100 billion cubic yards is incorrect. Using a larger-scaled topographic map, the following assumptions were used in the calculation of site capacity:

    Refuse to daily cover ratio = 5:1
    Initial in-place density of refuse = 1,425 lbs/cubic yards
    Ultimate settlement = 15 percent of refuse volume
    Operating days per year = 312 days

    The gross remaining air space (GRA) was calculated to be 1,421,840,000 cubic yards based upon the existing topographic map (in the preliminary Report of Waste Discharge). To determine the net air space available for waste, the GRA was reduced by the volume needed for the liner system, the final cover, and ultimate settlement. The net remaining air space (NRA) was calculated to be 1,276,561,000 cubic yards. Assuming a density of 1,425 lbs/cubic yard yields a net remaining tonnage (NRT) for the site of 909,549,000 tons. Based upon a 312-days-per-year operation, the site life was estimated to be approximately 145 years.

The project sequencing shown in Figures 18, 19, 20, and 21 of the draft EIS/EIR do not indicate waste volumes per sequence, because they are for illustrative purposes only. They represent a reasonable ordering of predictable activities over the life of the landfill.

21. This comment correctly calculates the number of 25-ton containers which would be generated at a 3,000 tpd capacity transfer station. They would number 120, not 140.

22. See Response 0139-20 above.

23. See Response 0002-4 above. Also, Section II.B.1 of the final EIS/EIR provides an expanded discussion of the composite liner design, and accompanying Figure 2 shows a cross section of the liner.

24. See Response 0002-4 above.

25. See Response 0002-4 above. The RWQCB's authority over the liner is discussed in the draft EIS/EIR, page 12.

26. See Response 0001-11. In addition, page 321 of the draft EIS/EIR concludes that the fine tailing material on-site meets all the regulatory requirements for a soil liner material and complies with the regulatory permeability requirements. The need for admixtures (also identified in the draft EIS/EIR, page 321), such as bentonite, to ensure that the material meets the more stringent Subtitle D requirements will be determined as part of the liner test section testing. The amount of admixture needed to achieve the required permeability is expected to be minimal, and it is not necessary to locate another source of claylike material to supplement the proposed liner material.

27. See Response 0139-26 above.

28. Boreholes BH-1 and BH-3 are located within fractured bedrock. These holes are too shallow to reach the groundwater table. Had they been drilled deeper, it is expected that groundwater would have been encountered. See Responses 0002-13a and 13b.

29. This comment is not correct. The site presently has a minimum of six bedrock monitoring wells (MW-3, MW-4, MW-6, MW-7, MW-8 and MW-9). The location of these wells is shown on a revised Figure 48 (see Response 0002-13a). It is true that the groundwater

chemistry in alluvium is different from that of bedrock origin. However, this chemical difference will serve to determine the source of these waters in monitoring wells. See Responses 0002-13a and 13b.

30. Although the drill logs say "coarse material," it is believed that much of this material is matrix-supported debris flows that are cemented and have low permeability. The east end of the East Pit shows debris flow material several hundred feet thick. See Response 0002-15.

31. The depression in the East Pit pond area is believed to be a natural depression in the groundwater table caused by high evaporation rates, with the water rising towards the surface by capillary action. The slow recharge under this area causes this "sump" to form. Groundwater is approximately 10 feet below ground surface in this area. The possibility of different heads is still being considered. See Response 0139-29.

32. Freeze and Cherry, "Groundwater," 1979, page 29, estimates permeability of clean sand at 1×10^{-2} cm/sec. This is quite a conservative estimate, given the amount of debris flow and fine sediments in the valley. Additionally, the last sentence of the fourth paragraph under j. Occurrence and Movement of Groundwater on page 132 of the draft EIS/EIR should be deleted. Current potentiometric data does not support the concept of a flatter gradient than 0.01 ft/ft.

33. This comment is correct; flow within the fractured bedrock is controlled by the fracture orientations. The flow directions presented in the draft EIS/EIR (page 132) are accurate and take this into account.

34. Permeability values of 1×10^{-9} to 1×10^{-1} cm/sec are not realistic. Freeze and Cherry, p. 29, reports these permeability values for *unfractured* metamorphic and igneous bedrock. Fractured metamorphic and igneous bedrock permeability values are in the range of 1×10^{-2} to 1×10^{-6} cm/sec. With these permeabilities in mind, the school well's "too high" value does not seem unreasonable.

35. The groundwater model developed by GSI/Water confirms that the estimate in the draft EIS/EIR is very close. Their investigations concluded an overall velocity of approximately 130 feet/year. This is based on pump test K values, known potentiometry, gradient, and porosity. See Response 0013b.

36. The reference cited in the paragraph refers to the permeability values. Laboratory testing in 1991 by Geosyntec Consultants of Huntington Beach, California, confirm these values.

37. The entire iron ore mineral processing procedure was performed by using gravity or magnetic separation techniques. No chemicals or other additives were used during

processing. The fine tailing has been subjected to the EPA TCLP test procedure and found to contain no compounds that are solubilized to action levels during this test.

38a. The reference to potential adsorption was made in a parenthetical note as part of the explanation of assumptions used in estimating potential flow rates. As such, it is an appropriate explanation, not a speculation.

38b. See Responses 0001-21, 0002-11, and 25.

39. See Responses 0002-11, 12, and 25.

40. See Response 0001-43.

41. See Response 0001-43.

42. MW1D was a duplicate sample. Additional sampling data are presented in trilinear diagrams in the Hydrogeology and Water Quality appendix of the EIS/EIR (see Appendix C, Figures 3 and 8). These figures illustrate the same pattern of ion concentrations. At the time the draft EIS/EIR was published, monitoring data from well CW-3 had not been obtained. The data in Appendix C, Table 7, indicate that the groundwater in CW-2 was very similar to CW-4. The information requested in this comment regarding CW-2 and CW-3 is provided on the attached figure.

43. A north arrow and scale have been added to Figure 47 shown on the following page. A north arrow has also been added to Figure 48; the figure has also been updated to show the location of additional water monitoring wells (see Response 0002-13a). Figure 48 is not missing the 720 MSL contour line; the line (the circle just underneath the word "POND") was not big enough to allow the designation to be placed directly on top. The U.S.G.S. topographic base map was not identified throughout the draft EIS/EIR.

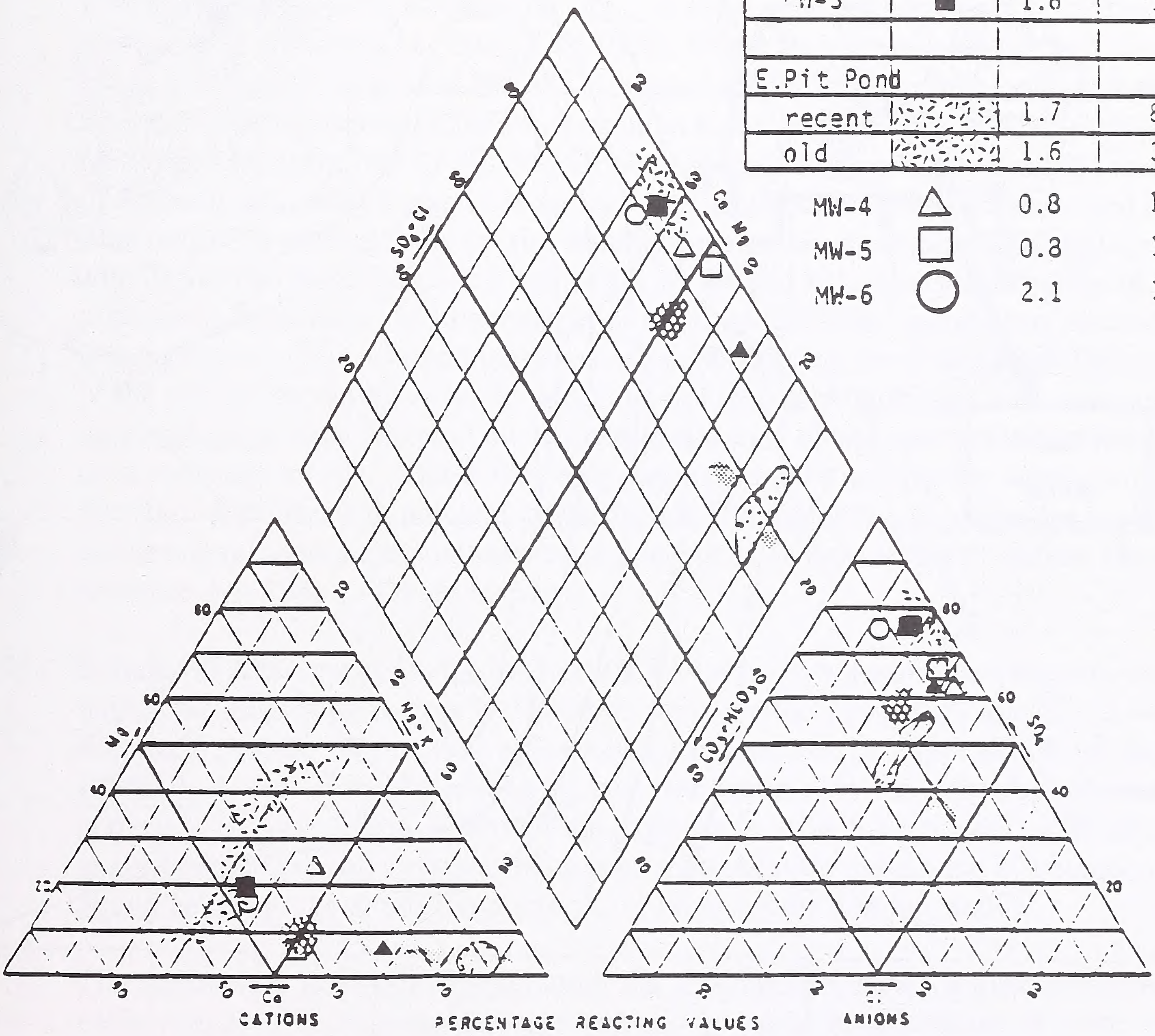
44. See Response 0001-54.

45. The estimate of daily LFG generation presented in the Pubic Health and Safety section (p. 335) represents an estimate for the year 2092 (100-year project life), whereas the estimate presented in the Air Quality section (page 376) is for 35 years, which explains the discrepancy.

The entire topic of estimating future emissions of landfill gas is highly uncertain (see Response 0001-54).

Extending the plastic liner serves as an additional control to eliminate fugitive LFG emissions (see 0001-44).

WELL	SYMBOL	MEAN F1	MEAN TDS
MW-1	░	0.76	566
SW	▓	1.93	978
Chuckwalla Wells	▒	7.7	799
MW-2	▲	4.6	860
MW-3	■	1.6	1600
E.Pit Pond			
recent	▒	1.7	8366
old	▒	1.6	3241
MW-4	△	0.8	1155
MW-5	□	0.8	1115
MW-6	○	2.1	1430



DATE	09/16/91
JOB NO.	G125-12
DWG NO.	EM12025
DRAWN	G BENAVIDES
CHK'D	M MURPHY
APP'D	B MURPHY

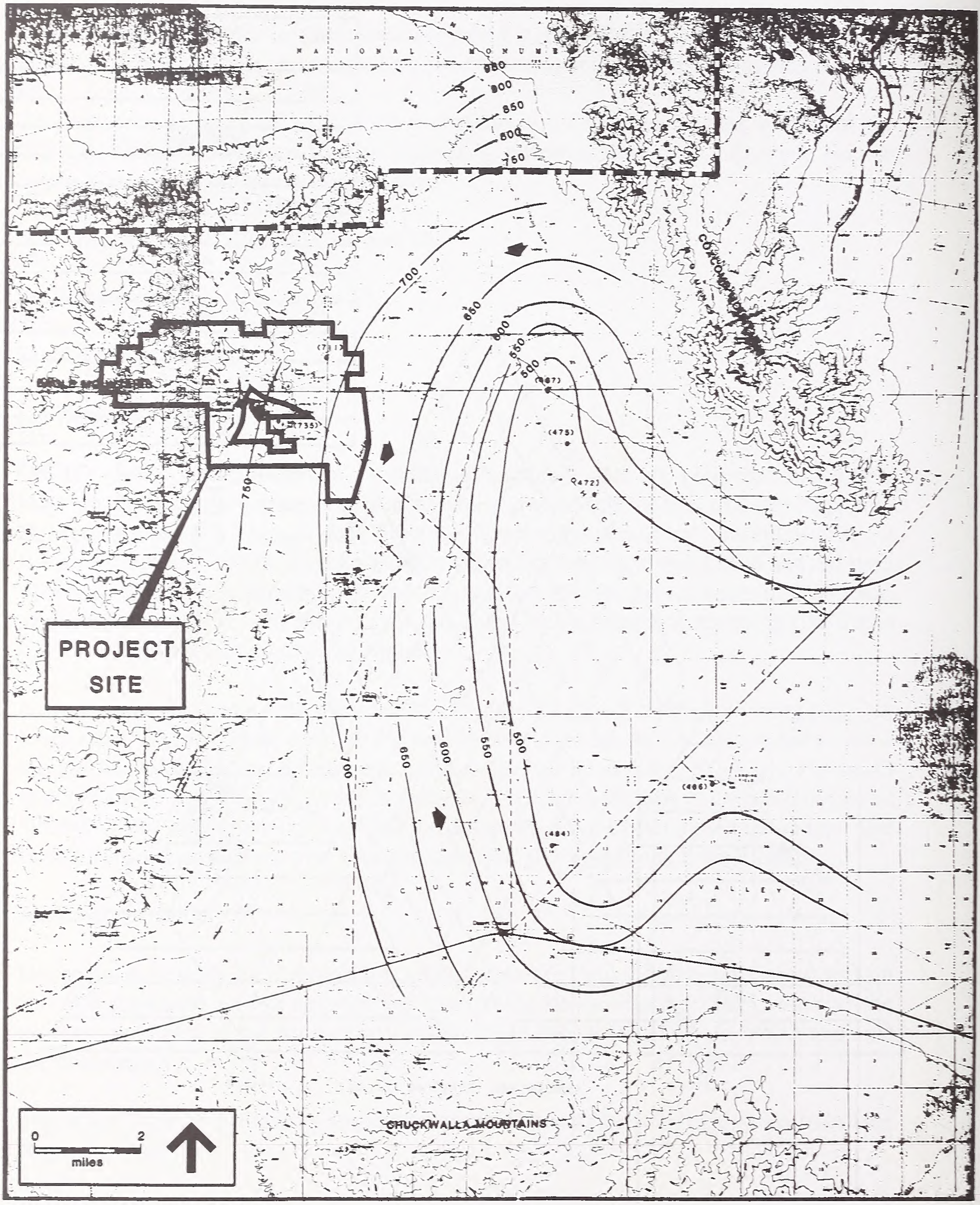
The PRA Group, Inc
CONSULTING ENGINEERS

QUALITY PARAMETERS PLOTTED ON TRILINEAR DIAGRAM

EAGLE MOUNTAIN LANDFILL, RIVERSIDE COUNTY, CALIFORNIA

MINE RECLAMATION CORPORATION

FIGURE NO 18



SOURCE: SCS ENGINEERS

◀ DIRECTION OF GROUND WATER FLOW

FIGURE 47. CONTOUR MAP INDICATING GROUNDWATER FLOW DIRECTION

46. See Responses 0001-44 through 56.

47. See Responses 0001-44 through 56 and 0002-5.

48. The draft EIS/EIR (pages 25-31) discusses the conversion of the rail right- of-way for mining purposes to a FLPMA right-of-way for the purpose of transporting refuse containers to the proposed landfill. This action does not require legislative authorization. Access to the rail right-of-way already exists on public lands.

49. Several modeling runs using screening level meteorological conditions were conducted to analyze the project's ambient impacts. A separate modeling run was conducted for each criteria pollutant (i.e., NOx, CO, ROG, PM10, and SO_2) using the Environmental Protection Agency-approved SHORTZ dispersion model. The results of these modeling runs are shown in the draft EIS/EIR, Appendix E, Tables 29, 36, 49, and 52. Furthermore, Mitigation Measure AQ-23 (draft EIS/EIR, Appendix E, page 130) required a reanalysis of ambient air quality impacts using meteorological monitoring data collected on-site. This revised modeling using on-site weather data has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. Included as Attachment 8 is a discussion of the revised modeling and accompanying input and output files for each of the revised modeling runs. In addition, included as Attachment 7 are summaries of meteorological data collected on-site and summaries of ambient air quality monitoring data collected on-site. These files and summary tables specify the wind speed, wind direction, stability class, and grid system for each modeling run, as well as the background ambient levels and project impacts at each receptor. In light of this modeling, Mitigation Measure AQ-23 is no longer required.

50. Included as Attachment 3 in the final EIS/EIR (Appendix M) are emission summary tables listing the emissions factors and process rates for the equipment associated with the mitigated project. Reduction efficiencies are discussed in Appendix E of the draft EIS/EIR, as part of the evaluation of each mitigation measure. The capture rate of 80 percent is an assumption, based on the experience of SCS Engineers. The air quality analysis includes a very conservative assumption that the remaining 20 percent of LFG would be lost to the atmosphere, instead of being retained in the landfill.

The commenter does not disagree with the assumptions used for trace compounds in LFG, nor does he suggest alternate values. In fact, concentrations of trace organic compounds within LFG vary widely. For example, in 85 measurements reported by Wood and Porter, the concentrations of vinyl chloride range from below detectable limits to 44 ppm (44,000 ppb), with a mean value of 3.4 ppm (Wood, John A., and Michael L. Porter, Hazardous Pollutants in Class II Landfills, South Coast Air Quality Management District, El Monte, California, December, 1986). SCS Engineers supplied the concentration assumptions used in Table 32 of Appendix E, based on their literature search and design experience. The values suggested for vinyl chloride by SCS Engineers were 12.9 ppm maximum and 6.7 ppm mean.

51. The draft EIS/EIR contains the emission factors and process rates for the equipment associated with the unmitigated project (Appendix E, pp. 70-91). The corresponding emission factors and process rates for the mitigated project are included as Attachment 3 of the final EIS/EIR (Appendix M).

    In addition, input and output files for the revised modeling runs using meteorological data collected on-site are included in Attachment 8, Appendix M of the final EIS/EIR.

52. The draft EIS/EIR acknowledges that the proposed project would have a significant impact on air quality in the Southeast Desert Air Basin (Appendix E, pp. 139-146). As addressed by the commenter, Mitigation Measure AQ-23 in the draft EIS/EIR (Appendix E, pp. 130) requires a re-analysis of ambient air quality impacts using meteorological monitoring data collected on-site.

    The revised air quality modeling using weather data collected on-site has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. The results of the revised modeling show that project impacts (including those at the Joshua Tree National Monument) will not exceed federal Class I and II increments and will not exceed either federal or California ambient air quality standards for CO, NO2, and SO2. Project impacts alone for PM10 are well below federal and California ambient air quality standards. Furthermore, the revised modeling show that cumulative impacts will not exceed the annual average PM10 federal and California standards. However, the highest background PM10 ambient values measured on-site exceed the 24-hour average PM10 federal and California standards. Therefore, regardless of the magnitude of project PM10 impacts, when project impacts are added to the maximum measured background levels the resulting cumulative impacts still exceed 24-hour average federal and California PM10 ambient air quality standards. In light of this modeling, Mitigation Measure AQ-23 is no longer required.

53. As discussed in Responses 0139-51 and 0139-52, the revised air quality modeling using weather data collected on-site has been completed and the results are summarized in Attachment 5, Appendix M of the final EIS/EIR (Tables 29, 36, 49, and 52). A comparison between the results of air quality modeling using screening level meteorological data and the results of modeling using meteorological data collected on-site is shown on Table FEIR-AQ-14, Attachment 2, Appendix M of the final EIS/EIR. As shown on this table, the use of weather data collected on-site does result in substantial reductions in estimated project impacts.

It is only "common" to use five years of site-specific monitoring data if a new project is fortunate enough to be located next to or very near a permanent monitoring station, such as those operated by air pollution control agencies. For remote locations such as Eagle Mountain and Amboy, on-site meteorological data collected for one year is commonly required by regulatory agencies. While data from existing airports are often accepted by air pollution regulatory agencies, up to five years of such data are often compared with data collected in accordance with EPA-approved protocols. However, due to the remote location of the Eagle Mountain project, there are no permanent monitoring stations located adjacent to the project site. Therefore, it was necessary to install an on-site meteorological and ambient concentration monitor to perform detailed air quality modeling studies.

As discussed in Response 0139-52, the results of the revised modeling analysis show that project impacts will not exceed federal Class I or II increments and will not exceed either federal or California ambient air quality standards for CO, NO_2, SO_2, and PM10 (annual average only). Project impacts alone for PM10 are well below federal and California 24-hour average ambient air quality standards. However, the highest background ambient values measured on-site exceed the 24-hour average PM10 federal and California standards. Therefore, regardless of the magnitude of project impacts, when added to the maximum measured background levels, the resulting cumulative impacts still exceed 24-hour average federal and California ambient PM10 air quality standards. As part of the SCAQMD air quality permitting process, the project will be required to obtain PM10 emission offsets. However, it is doubtful that these offsets will be sufficient to lower maximum ambient on-site background PM10 levels below 24-hour average federal and California air quality standards.

54. Several conversations with Environmental Protection Agency Region IX staff formed the basis for the conclusion that emissions associated with on-site vehicles are not included for purposes of determining applicability with federal Prevention of Significant Deterioration regulations. A PSD applicability determination request to the EPA confirmed that. See Response 0139-55 below and Appendix M, Attachment 11.

55. The SCAQMD PSD regulations are not presently in effect and are not expected to apply to the project. Project conformance with PSD requirements has been evaluated by EPA under the federal PSD program and found in conformance (Appendix M, Attachment 11). Compliance with the requirements of this program is discussed in the draft EIS/EIR, page 413 and Appendix E, pp. 97-101.

Before air quality permits are issued for the construction and operation of the proposed project, it will be necessary to demonstrate to the South Coast AQMD that the project will comply with all applicable regulatory limits. If PSD review is triggered, these applicable regulatory limits will include demonstrating that the project will not exceed allowable increment levels in the project area.

The project applicant will not seek any exemption from PSD regulatory requirements, since none are available. Based on the on-site meteorological data, the project will, in fact, comply with all applicable air quality regulatory requirements.

56. Please see Responses 0139-57, 58, 59, and 60 for a discussion of the screening level risk assessment. The results of the health risk assessment reanalysis are summarized in Response 0003-40.

57. Included as Attachment 8 (see Attachment 8-3 and 8-4) in the final EIS/EIR (Appendix M) are copies of the input and output files for the modeling analysis used for the revised risk assessment contained in Attachment 9, Appendix M of the final EIS/EIR. These files show the emission rates, meteorological conditions, and grid system used for the modeling analysis.

58. The source of the landfill composition data is amplified in the revised health risk assessment found in Attachment 9, Appendix M of the final EIS/EIR.

59. See Response 0164-15 for a discussion of landfill gas flares toxic compound destruction efficiencies. The LFG collection efficiency of 80 percent is an assumption, based on design experience of SCS Engineers.

60. The revised risk assessment in Attachment 9, Appendix M of the final EIS/EIR adds a discussion of the potential chronic non-cancer health impacts, which were found to be at acceptable levels. Acute health hazards were not assessed, because the landfill gas flares are protected against the foreseeable possibility of accidental releases of untreated gas.

61. It is unclear what is meant by, "This level of analysis does not appear to be provided." In fact, analyses of the impacts of the project on air quality in Joshua Tree National Monument were prepared using EPA-approved screening techniques and health conservative assumptions; these analyses are discussed in the draft EIS/EIR, Appendix E, pp. 59-61 and 92-94. The comment then repeats conclusions from the draft EIS/EIR.

As discussed in Responses 0139-49, 51, 52, and 53, revised modeling using weather data collected on-site has been completed and the results are summarized in Attachment 5, Appendix M of the final EIS/EIR (see Tables 29, 36, 49, and 52). The results of the revised modeling show that project impacts at Joshua Tree National Monument will not exceed federal Class I or II increments. Therefore, there is no need for any mitigation measures in addition to those specified in the final EIS/EIR. Nevertheless, Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce Eagle Mountain railway locomotive emissions.

62. As discussed in Responses 0139-55 and 61, project impacts in the draft EIS/EIR were based on extremely conservative modeling assumptions. The draft compared worst-case project impacts in the Joshua Tree National Monument with allowable Class I increments. Furthermore, as discussed in Response 0139-61, the revised modeling using weather data collected on-site shows that project impacts at the Joshua Tree National Monument will not exceed federal Class I or II increments.

63. The conclusions in the draft EIS/EIR regarding visibility impairment in the project area were based on an extremely conservative Level-1 visibility screening analysis using procedures specified in the EPA publication "Workbook for Estimating Visibility Impairment" (November 1980). For the final EIS/EIR, a Level-2 visibility screening analysis has been performed using the EPA-approved VISCREEN model. This analysis indicates that there will be no significant adverse visibility impacts at the Joshua Tree National Monument due to the operation of the proposed project. These results can be found in Attachment 4, Appendix M of the final EIS/EIR.

64. As shown on the table cited by the commenter (Appendix E, pp. 74, Table 20), the train car spotters and container handlers will *not* be used at all seven transfer stations. The train car spotters will only be used at the rail-access transfer stations and the container handlers will only be used at the truck-access stations. Therefore, the total number of car spotters is 2 rather than 77, and the total number of container handlers is 12 rather than 14. The comment is correct that the fuel consumption rate for rubber-tired loaders shown on Table 20 of Appendix E of the draft EIS/EIR is incorrect. The correct fuel consumption rate for a single rubber-tired loader should be 6 gallons per hour rather than 7 gallons per hour. The correct fuel consumption rate was used for the "Reduced Operations" and "Rail Only" alternatives. However, this same error was incorporated in emission estimates for the "No Project" alternative. Enclosed as Attachment 5 in the final EIS/EIR (Appendix M) is the revised Table 20 as well as the other tables in the draft EIS/EIR affected by this error. These corrections do not change the conclusions made in the draft EIS/EIR.

Finally, the calculated emissions for the rubber-tired loaders shown on Table 20 are correct using the fuel consumption rate of 6.64 gallons per hour assumed for this analysis. This value was rounded up to 7 gallons per hour on Table 20. However, as discussed above, this value has been corrected to 6 gallons per hour.

65. The purpose of the table cited by the commenter in the draft EIS/EIR (Appendix E, Table 33, p. 100) is to show that if the landfill gas flares were not equipped with emission controls, the project may trigger federal Prevention of Significant Deterioration require-

ments. The unmitigated flare emissions shown on Table 33 were calculated using the emission factors and process rates shown on Table 25 of the draft EIS/EIR (Appendix E, pp. 83) and assume that the flares were not equipped with emission control systems. However, as discussed in the draft EIS/EIR, emission controls on the flares are included as part of the project design features in order to comply with SCAQMD and U.S. Environmental Protection Agency emission standards (Appendix E, page 90). Therefore, the emission estimates for the landfill gas flares shown on Table 25 and 28 of the draft EIS/EIR account for the installation of emission control systems (Appendix E, pp. 83 and 91).

66. The grid system and locations of receptors studies for the analysis of project impacts on Joshua Tree National Monument are contained in the modeling input and output files included as Attachment 8 in the final EIS/EIR (Appendix M). As shown in these files, there is a different point of maximum impact in JTNM depending on the pollutant studied. Therefore, there are several corresponding distances to JTNM depending on the receptor of interest. The correct relationship between the boundaries of JTNM and project sources was used in all of the air quality modeling analyses. The distance referenced on page 94 of Appendix E should be read in this context. The actual distance to JTNM's closest boundary is about 1.5 miles (see draft EIS/EIR, page 3).

67. The CO emissions for the transfer stations increase as a result of mitigation measures. The mitigation CO emission factors for the transfer station loaders, container handlers, and train car spotters are higher than the unmitigated CO emission factors for this same equipment. However, the mitigated emission factors for all other criteria pollutants (i.e., NOx, ROG, SO_2, and PM10) are lower than the corresponding unmitigated emission factors for this same equipment. A listing of the emission factors for the unmitigated equipment at the transfer stations are shown on Tables 19 and 20 of the draft EIS/EIR (Appendix E, pp. 73 and 74). The emissions factors for the mitigated equipment at the transfer stations are shown on the tables included in Attachment 3 in the final EIS/EIS (Appendix M).

68. The habitat where two tortoise sign were found is along the rail line near the town of Eagle Mountain. The habitat is of very low quality for tortoises in this area. No project-related impacts are expected where the sign was found. The mine site itself, as well as the town of Eagle Mountain, supports no tortoise habitat. Any rail line maintenance will be monitored by a qualified biologist to ensure no "take" of tortoises (draft EIS/EIR, page 499, Appendix F, pages 85-87).

69. The Category 1 tortoise habitat is considered very significant, and that is why it has been designated an Area of Critical Environmental Concern by the BLM. With implementation of the mitigation measures outlined in the draft EIS/EIR, the project is not expected to have any significant impacts on the Category 1 tortoise habitat.

70. This comment is correct. This response acknowledges that the discussion on impacts to tortoises from rail spur construction under the Rail Access Only alternative (page 452 of the draft EIS/EIR) should reflect the following:

    Impacts. Potential impacts to tortoises from habitat loss, incidental road kills, and potential habitat fragmentation will be reduced by eliminating truck traffic on the Eagle Mountain Road. Permanent impacts to 33.3 acres (compared to 150 acres in the proposed action) of Category 3 tortoise habitat will occur due to the construction of the 2.5-mile-long rail spur, along with potential loss of individual tortoises within this construction zone. Impacts to tortoises from raven predation will be reduced because fewer road kills to be scavenged by ravens will occur, thus reducing the level of attraction for these birds to the site. Significant impacts similar to the proposed action remain due to landfill operation and railroad service.

    Mitigation. The loss of 33.3 acres of Category 3 desert tortoise habitat would require the purchase and donation to permanent open space of 83.3 acres (BLM compensation ratio of 2.5:1) of tortoise habitat. A preconstruction clearance survey of the spur right-of-way would be necessary to remove any tortoises within the construction zone to a distance of at least 300 feet from the right-of-way. Remaining mitigation measures are the same as those listed under the proposed action for impacts associated with rail line and landfill operations.

71. For an area to be utilized by bighorn sheep, all necessary elements for sheep survival must be present before it can be considered habitat. Much of the Eagle Mountains supports vegetation and cover that is necessary for sheep survival but lacks year-round water sources. Therefore, it would not be considered year-round habitat. Placement of new water sources in these areas would actually be creating new year-round habitat, replacing that lost to the landfill. It should be noted that Nelson's bighorn sheep is not listed by the CDFG or the USFWS under the California or federal Endangered Species Act as threatened or endangered, but is a CDFG Fully Protected and a BLM Sensitive Species.

72. Compensation for loss of 894 acres of bighorn habitat will be creation of new habitat through the creation of new water sources. See Response 0026-80. This response acknowledges that the term "high-quality" to describe the 744 acres of habitat that will remain on the project site (page 456 of the draft EIS/EIR) should be deleted. See Response 0034-11.

73. No impacts to wetlands are anticipated from the proposed project (draft EIS/EIR, page 468). The water sources mentioned under the discussion of Nelson's bighorn sheep are not considered wetlands since they lack characteristic wetland qualities (hydrophytic vegetation, hydric soils, or wetland hydrology). A discussion of the 404 process is on page 467 of the draft EIS/EIR. Since the anticipated deposition of fill to jurisdictional

"waters of the United States" (e.g., intermittent streams) will exceed one acre, an individual project 404 permit will be required from the USACE.

74. Figure 57a has been revised to include a legend. The revised figure follows this page.

75. The information regarding tipping fees was prepared by the project applicant, Mine Reclamation Corporation, as part of its internal economic analysis for the project. At the time of preparation of the draft EIS/EIR, the $18.50 per ton average tipping fee was arrived at by averaging various publicly posted and reported tipping fees at major private and public landfills in Los Angeles County. The $45.00 per ton tip fee estimate for the project was presented in MRC's proposal in response to a Request for Proposal for remote disposal of solid wastes prepared by the Los Angeles County Sanitation Districts in 1989.

76. The landfill footprint is delineated and identified by words on its north and south borders.

77. See Responses 0002-13a and 13b and 0139-29.

78. Providing the requested map clarification would not correct an identified deficiency in the draft EIS/EIR or change any of its conclusions. The expense of the request is not warranted.

79. The strike and dip symbols do conform to U.S.G.S. standards.

80. This comment identifies no specific deficiency in the draft EIS/EIR, but recommends a graphic be added for clarification. A requirement of the RWQCB permit process, at this point the cross section was not included due to its expense.

81. Please refer to Response 0001-21 and 0002-11.

82. Please refer to Response 0002-11.

83. Yes, the photolineaments have been examined in the field. Please refer to Response 0001-21 and 0002-11.

84. The reference for *BLM Manual Section 8400 - Visual Resource Management (VRM)* (no date) was omitted from the draft EIS/EIR and now appears at the conclusion of this response section. There is a brief summary of the BLM's methodology under the introductory statement, Section IV.J.1. of the draft EIS/EIR (p. 492). This section of the draft report was prepared with extensive input from BLM staff.

85. Based on the VRM's scenic quality evaluation criteria, landscape areas are given an A (high), B (medium), or C (low) rating based on the apparent scenic quality which is

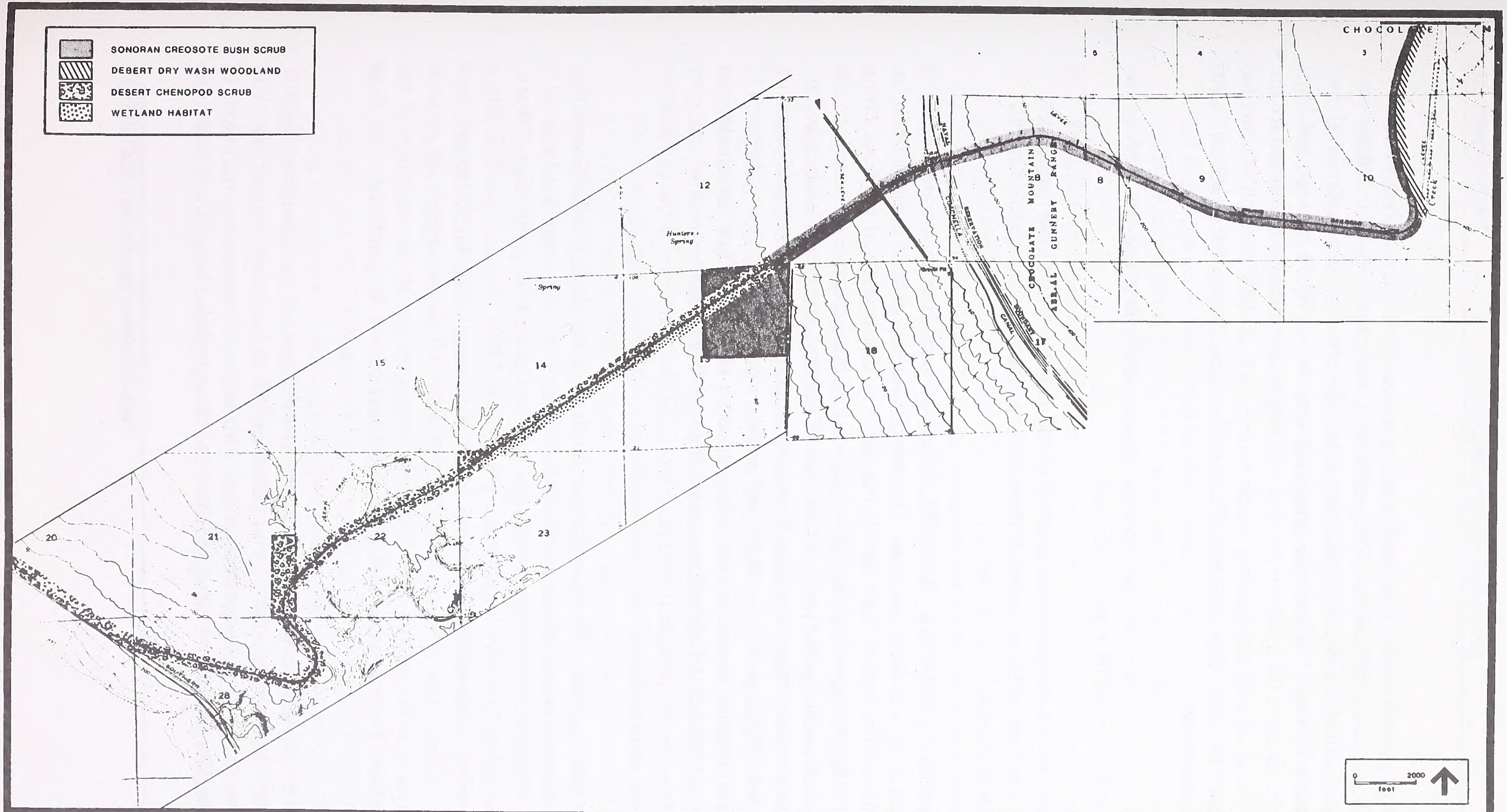


FIGURE 57a. EXISTING VEGETATION ON THE EAGLE MOUNTAIN RAIL LINE AND KAISER PROPERTIES, MAP 1 OF 5

determined using seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. The area is evaluated on a comparative basis with similar features within the physiographic province. Therefore, scenic quality is relative to the regional landscape. In this case, mapping done by the BLM on a general level established the baseline for the more detailed mapping and evaluation conducted for the study area. Areas of truly outstanding scenic values, such as the Coxcomb Mountains, set the standard for ranking other areas. That is why other less unique landforms were ranked medium or low.

86. Note that after the "concerning the existing mining area" language set forth in the comment, the draft EIS/EIR at page 265, states:

> However, they [the mined areas] create a strong disharmony with the form, line, color, and texture of the mountain formations in which they are located. Overall visual quality is low.

In assessing scenic quality using the VRM, variety in form, line, color, and texture is generally seen to be a positive attribute. However, there is a specific rating criteria for cultural modifications which "add variety but are very discordant and promote strong disharmony." In these cases, the negative implications (i.e., a negative "score" on the evaluation sheet) outweigh the positive and shift all but the most scenic landscapes into the "low" scenic quality category. This is consistent with the evaluations performed on a regional level. Although it is true that most viewers would likely give a higher rank to the undisturbed bajadas, dunes, and dry lakes, these areas are still "low" in comparison to the jagged, colorful peaks of the Coxcombs. Because there is no "extra-low" category defined for the mine, the disturbed mine pit is ranked on the same level as the undisturbed bajadas, dunes, and dry lakes.

87. The commenter is correct. The conclusions reached in the draft EIS/EIR regarding visibility impairment in the project area were based on an extremely conservative Level-1 visibility screening analysis using procedures specified in the EPA publication "Workbook for Estimating Visibility Impairment" (November 1980). For the final EIS/EIR, a Level-2 visibility screening analysis has been performed using the EPA-approved VISCREEN model. This analysis indicates that there will be no significant adverse visibility impacts at the Joshua Tree National Monument due to the operation of the proposed project. These results can be found in Attachment 4, Appendix M of the final EIS/EIR.

88a. It is true that the impact analysis focuses on the visual impact of the completed landfill. This response acknowledges that the completed landfill and construction activities will be visible from some key observation points. This will not change the conclusions of the visual assessment—construction activities and the completed landfill will meet both the Class III and Class IV management objective. The measure of impact in terms of the VRM is visual contrast (in form, line, color, and texture) resulting from the proposed project and activities and whether or not that contrast exceeds levels appropriate for the management class. At the typical viewing distance (5-10 miles), construction activities would not be readily apparent.

88b. The Kaiser Mine Reclamation Plan was approved in 1978. It does not contain "substantial requirements for the visual improvement of the site." The minimal requirements for visual improvements in that 1978 plan would not change the conclusion that the site would be visually degraded after reclamation.

89. The tree planting program would occur as part of the repopulation of the Eagle Mountain townsite (see draft EIS/EIR, page 512). However, this program would not be funded by MRC because the Eagle Mountain townsite is not a part of the project. A separate specific plan requiring CEQA review will be developed for the townsite at a future date (page 438 of the draft EIS/EIR). Site development plans (including landscaping) will be consistent with the Riverside General Plan and approved by the County as a condition of the Specific Plan for the townsite.

90. The evaluation of night lighting, its significance, and appropriate mitigation measures was generated from consultation with Joshua Tree National Monument staff. A combination of features, including restriction of nighttime activities, the location of nighttime lighting well away from the Joshua Tree National Monument boundary, and the use of shades on individual light fixtures, will avoid significant impacts. The glare effects of the previous mining activities will not be repeated and do not require further analysis.

91. The bibliography of the draft EIS/EIR includes the Wyle reference and will be modified to correctly list the FHWA model, which is among the most common of the calculation procedures for estimating noise from roadways (See bibliography at the end of this responses section of the final EIS/EIR). Noise levels for equipment that may be used at the landfill site were derived from several sources (see draft EIS/EIR, page 552).

92. See draft EIS/EIR, Appendix F, pages 74-78 for a detailed discussion of noise impacts on the desert tortoise.

93. The commenter is correct in recognizing that there is no quantitative criterion for determining the significance of energy consumption. As noted in the draft EIS/EIR (page 572), no concerns regarding energy consumption were expressed during the scoping process. Among the various remote rail haul sites considered, it is true that the Eagle Mountain ranks among the highest in terms of transportation-related energy consumption and air emissions. This does not necessarily equate to a significant energy impact. Unlike air quality, there are no quantitative thresholds in use for defining energy impacts

and there is no energy equivalent to "nonattainment" status defined by regulations. The Amboy project may require additional energy consumption on-site to the extent that it must create a depression and mine cover material, both of which already exist at Eagle Mountain in the form of the mine pit and tailings piles. These facts, plus the potential for and commitment by the applicant towards energy recovery from the project and other mitigation measures (page 578 of the draft EIS/EIR), lead to the conclusion that its energy use does not represent a significant impact.

94. The draft EIS/EIR discusses cumulative impacts on pages 589-598. It is correct that there are few or no criteria for significance in discussing cumulative impacts. Conclusions in the report, however, are based on much more than just the level of individual impacts of this one project. Rather the draft EIS/EIR analyzed the collective impacts of all projects which might cause cumulatively significant impacts. Other factors considered include the restorative function of the project (page 587), the remoteness of the area and large size of the region considered (page 587), the relatively low number and small size of other active uses in the area (page 587), and historical size and extent of the Eagle Mountain community, and the fact that it is controlled by a single owner (page 588).

95. The report does describe a variety of cumulative effects, including those on water quality and use (page 589), air quality (page 592), biology (page 593-594), visual character (page 595), and others. The conclusions reached in the report, while necessarily subjective in some respects, are neither arbitrary nor attributable solely to the report's authors. In addition to the scoping process described in the report (pages 6-9), both lead agencies and many associated offices exercised substantial independent review authority and added substantial input and analysis to the draft EIS/EIR.

DOCUMENT 0140 Letter from Hugh L. Cochran, September 16, 1991

1. The draft EIS/EIR does evaluate the many and varied potential environmental impacts of the proposed project.

2. The Pinto Valley groundwater basin and its storage capacity are discussed on pages 112-115 in the draft EIS/EIR. Since this comment does not question the adequacy or accuracy of the draft EIS/EIR, no further response is necessary.

3. See Responses 0001-25 and 0002-4.

4. See Responses 0001-25 and 0002-4. No drainage from the proposed project will be directed toward the open Colorado River Aqueduct. Drainage outlets and other upstream facilities will be designed and sized to minimize velocities and reduce erosion. Where drainage is planned to cross the covered portion of the aqueduct, MWD will be consulted as to design and location. Copies of the drainage report and detailed plans were

forwarded to MWD for review. All drainage facilities for conveyance of flow over the aqueduct will be reviewed and approved by MWD prior to construction. The drainage report is included as Appendix L of the final EIS/EIR.

5. See Response 0012-1 above.

6. See Responses 0001-97 and 0003-4, 5, and 6.

7. See Response 0126-4 above.

DOCUMENT 0141 Letter from Susan Lunn, no date

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0142 Letter from Doris and Tom Stevens, September 19, 1991

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0143 Letter from Susan G. Carney, September 23, 1991

1. The proposed landfill would be a Class III nonhazardous municipal solid waste facility and as such would only accept nonhazardous solid wastes and inert wastes (pages 3 and 48 of the draft EIS/EIR). In the event that hazardous materials illegally enter the waste stream, the MRFs and transfer stations would provide methods to sort and separate the waste prior to being transported to the landfill site. A description of this process appears in Section IV.B.1 of the draft EIS/EIR.

DOCUMENT 0144 Letter from California Department of Conservation, September 17, 1991

1. This letter does not comment on the adequacy or accuracy of the draft EIS/EIR, and hence, no response is required.

DOCUMENT 0145 Letter from County Sanitation Districts of Los Angeles County, September 20, 1991

1a. Section II.G.2.a discusses in detail the alternative remote desert site rail haul project at Amboy (pages 77-86 in the draft EIS/EIR). This comment corrects and amplifies Section II.G.2.b, Proposed Landfills/Expansions of Existing Landfills in Counties Where Waste is Generated (pages 86-104). Three landfills within Los Angeles County, Bradley West, Chiquita Canyon, and Scholl Canyon, in addition to the two discussed in the draft EIS/EIR, have expansion potential.

1b. Regardless of the specifics mentioned in this comment, the three conclusions regarding existing landfills or the expansion of existing landfills are not altered in the draft EIS/EIR: (a) there would be less of an impact to air quality; however, the impact would still be significant and unmitigated; (b) there would be less energy consumption; and (c) the use of these sites would not necessarily involve processing wastes through MRFs.

2. Flare emission factors without the use of oxidation catalysts and urea injection are shown in the draft EIS/EIR, Appendix E, at page 83. The use of these emission control systems when gas generation rates exceed specified levels is a mitigating project feature proposed by the project proponent and not an additional mitigation measure required as a result of the draft EIS/EIR. Consequently, it is not necessary to present emission estimates for flares which do not reflect these controls, since no one is proposing the construction of the project without them.

   The reference on page 382 to uncertainty regarding the commercial availability on a urea injection system at a point in the future is incorrect; as properly stated on page 129 on Appendix E of the draft EIS/EIR, the comment regarding uncertainty of the future availability of technology relates only to the oxidation catalyst system. This issue is reached, however, only if an energy recovery facility which would be expected to generate lower hydrocarbon and monoxide emissions than a flare is not built.

3. The comment is correct that the air quality analysis in the draft EIS/EIR assumes an oxidation catalyst CO control efficiency of 90 percent for the landfill gas flares. Therefore, the section of the draft EIS/EIR cited by the commenter (page 382) should read "at least a 90 percent reduction" rather than "at least an 80 percent reduction."

4. The data attached to the comment showed emission factors for NOx, SO_2, and PM10 which are virtually identical with those used in the draft EIS/EIR. The factors presented for hydrocarbon and carbon monoxide emissions are substantially below those presented in the draft EIS/EIR; in fact, the factors presented by the commenter are below those assumed to be achievable with an oxidation catalyst. Consequently, the draft EIS/EIR continues to reflect a worst-case estimate of potential flare emissions. If the emission factors presented by the commenter are verified and guaranteed by a flare system vendor, actual impacts associated with the flares will be lower than those contained in the draft EIS/EIR, and no oxidation catalyst will be necessary to achieve those levels.

5. To be conservative, the screening level air quality impact analysis contained in the draft EIS/EIR assumed that the flares were located at the same elevation as the receptors

studied. The suggestion made by the commenter will be taken into consideration during the design phase of the landfill gas collection system.

6. See Response 0027-24. The exact design and materials necessary to construct the adit extension have not been formulated. Materials and design will be proposed that will resist forces anticipated within the landfill and resist leakage.

7. While it would have been more correct to use the mid-range values shown in Figure 98 of the draft EIS/EIR, the use of these mid-range values would not result in different total noise levels being assumed for each grouping of equipment shown in Table 49 of the draft EIS/EIR. Therefore, the worst-case operational noise levels were used in this situation because it is impossible to predict the distribution and location of equipment on the site at any given time and which equipment would be operating.

   The draft EIS/EIR states on pages 555 and 556 the conservative nature of the assumptions made and their effect on the results and conclusions. The text states that the noise contours of Figure 99 assume a single point noise source at the landfill boundary, but that under a more realistic situation, the noise source would be spread throughout the landfill area. The dispersal of the equipment would dissipate noise levels and they would be lower than those used in the analysis. The text also states that earth-moving operations at the project site would mostly take place inside a landfill pit which would provide shielding for the noise. The draft EIS/EIR then concludes that the noise exposure at the closest residential area "would be considerably less than the calculation from the worst-case scenario."

DOCUMENT 0146 Letter from Sierra Club SCNRCC Desert Committee, September 23, 1991

1. The project is southeast of Joshua Tree National Monument and at its closest point is approximately 8,000 feet south of the boundary. Measures to control windblown debris associated with landfill operations are addressed in Section IV.J.4 of the draft EIS/EIR. Also, see Response 0026-9. In the event that JTNM or BLM staff observe or receive reports of problems developing with windblown debris, there will be operations personnel assigned to litter control who can be contacted to ensure the timely retrieval of stray litter. Monitoring of this clean-up procedure by JTNM staff is not considered necessary.

2. The information requested in the comment is contained in Response 0095-2b in the final EIS/EIR. This information is also included in the Biological Assessment prepared for the Section 7 consultation as required by the Endangered Species Act (see Appendix N of the final EIS/EIR).

3. This comment is correct in pointing out that the closest major tortoise population to the landfill site is in the Pinto Basin in Joshua Tree National Monument, approximately 5 to 6 miles to the north and west. Tortoise densities of 100 to 180 tortoises per square mile have been found in this area in recent years (Karl 1988; Freilich and Moon 1991).

4. This is not deemed a significant impact. Windblown trash will be controlled through the daily covering of refuse and fencing around the active portion of the landfill to catch windblown debris (draft EIS/EIR, pp. 514-517). See Response 0026-9. Also, there is very little tortoise activity in the vicinity of the proposed landfill, where windblown trash would be most likely to accumulate.

5. Although the exact length of the proposed chimney has not been established, it has been estimated that it would be approximately 250 feet long. Precautions will be taken in the design and selection of materials for construction of the chimney to prevent the infiltration of any landfill gases. As with other portions of the landfill, LFG detection probes will monitor for the presence of LFG and standard operating responses will be used if its presence is discovered. These responses may include increasing the draw on nearby LFG collection wells in the installation of new wells close to the point of detection. See Response 0001-25.

6. Alternative fuels do not result in inherently lower emission levels, except in specific applications. For on-highway vehicles, California's low-emission vehicle regulations, and the corresponding requirements of SCAQMD Rule 1601, achieve the objectives of what are popularly referred to as "alternative fuels." While alternative fuels may be used to comply with these regulations, they are not essential, nor do they provide any air quality benefits as compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low-emission vehicle programs are discussed in the draft EIS/EIR (Appendix E, pp. 107-108).

   For locomotives and landfill equipment, alternative fuels may provide air quality benefits. Appendix E of the draft EIS/EIR discusses the use of alternative fuels (such as methanol, natural gas, or liquefied petroleum gas) as well as electricity for locomotives (pp. 115-117) and for landfill equipment (pp. 120-121). See Response 0117-6 for a discussion of the air quality benefits associated with the electrification of the Eagle Mountain rail line. See also Response 0117-7 for a discussion of electrification of the Southern Pacific railway as a mitigation measure. Mitigation Measure AQ-16 states that wherever available, electric versions of landfill equipment including overhead cranes, crushers, conveyers, and pugmills will be used. Where not available, alternative-fuel technology will be used depending on air permitting standards.

   No quantification of air quality benefits from the use of alternative fuels in locomotives and in landfill equipment is possible at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used in the Eagle Mountain project.

7. It is not clear what the commenter means by "more attention." Fugitive dust is discussed on pages 337-339 as well as in Appendix E of the draft EIS/EIR.

8. Landfill gas generation, migration, control, and mitigation are discussed on pages 334-338 and 376-377 of the draft EIS/EIR, as well as in Appendix E.

9. The Eagle Mountain landfill project will not be directly involved in recycling efforts. Instead, recycling programs will be a mandatory component of the MRFs and transfer stations. All refuse destined to Eagle Mountain will be subjected to an inspection program for the removal of recyclables and hazardous materials at the transfer stations and MRFs. It will be the responsibility of the owner/operator of each of these facilities and the applicable local agency to ensure that the goals of AB 939 are implemented. The draft EIS/EIR discusses source reduction at pages 105-110.

DOCUMENT 0147 Letter from U.S. Department of the Interior, National Park Service, September 25, 1991

1. This comment states existing law and does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

2. Mitigation Measure AQ-23 (Appendix E, page 130) requires a reanalysis of ambient air quality impacts using meteorological monitoring data collected on-site. This revised modeling using weather data collected on-site has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. The results of the revised modeling show that project impacts (including those at the Joshua Tree National Monument) will not exceed federal Class I or II increments. Tables FEIR-AQ-9, FEIR-AQ-10, and FEIR-AQ-11 (included in Attachment 2, Appendix M of the final EIS/EIR) compare the results of the revised ambient impact modeling analysis from each project alternative with the corresponding Class II increment. These results indicate that all Class II increment limits will be met by the proposed project. In light of this modeling, Mitigation Measure AQ-23 is no longer required.

3. As discussed in the draft EIS/EIR, page 413, and Appendix E, page 92, analysis of project impacts were based on extremely conservative modeling assumptions. The draft EIS/EIR stated that because PSD review would likely not apply to the project, the Class I increment concept would not apply to the project under the Clean Air Act. The EPA has confirmed the nonapplicability of PSD review. See Appendix M, Attachment 11. The Class I concept was only used as a criterion to evaluate the significance of the

project's air quality impacts on the Joshua Tree National Monument. See also Response 147-2 above.

4. The draft EIS/EIR discusses offsets obtained pursuant to SCAQMD Rule 1309.1 on page 105 of Appendix E and page 429 of the draft EIS/EIR. However, the draft EIS/EIR incorrectly refers to offsets being withdrawn from the "Community Bank." This response reflects the revision to read "Priority Reserve" rather than "Community Bank." Recent conversations with SCAQMD staff indicate that the "Priority Reserve" is established, and offsets are available for sources qualifying as "essential public services," which is the case for the landfill gas collection system. However, it must be noted that by being designated as an "essential public service," the project is not exempt from any requirements under the SCAQMD New Source Review rules.

5. The comment is consistent with the conclusions reached by the draft EIS/EIR on pages 412-413.

6. In general, the commenter is correct. Under certain meteorological conditions, NOx and VOC emissions from the Eagle Mountain project would impact the Joshua Tree National Monument. However, ozone formation is a regional phenomenon, with the bulk of ozone (and ozone precursors) in the Southeast Desert Air Basin coming from the heavily populated South Coast Air Basin and from the Coachella Valley to the west. A review of actual wind data from the local meteorological station at the Eagle Mountain site indicates that during most hours throughout the year, emissions from the Eagle Mountain project will not affect JTNM. Even when ozone precursors flow from the project site towards the monument, there is not enough time for these precursors to significantly affect ozone concentrations within the boundaries of JTNM.

   There are no approved air quality models which can be used to estimate the project's impact on ozone concentrations at JTNM. Regional photochemical models, such as those used to prepare regional air quality plans, are not suitable for use for this purpose, because they are not sensitive enough to changes in emissions which are less the five percent of the regional total. The emission changes associated with the Eagle Mountain project are below this sensitivity threshold in both the Southeast Desert Air Basin and in the Coachella Valley. Due to the lack of an adequate modeling tool, it would be speculative to attempt to quantify the ozone impacts resulting from implementation of the proposed project.

7. The conclusions reached in the draft EIS/EIR regarding visibility impairment in the project area were based on an extremely conservative Level-1 visibility screening analysis using procedures specified in the EPA publication "Workbook for Estimating Visibility Impairment" (November 1980). A Level-2 visibility screening analysis has been performed using the EPA-approved VISCREEN model. This analysis indicates

that there will be no significant adverse visibility impacts at Joshua Tree National Monument due to the operation of the facility. These results can be found in Attachment 4, Appendix M of the final EIS/EIR. In light of this modeling, Mitigation Measure AQ-23 is deemed complete. See Response 0147-3 above.

8. The commenter is confusing federal ambient air quality standards with California ambient air quality standards. The section of the draft EIS/EIR cited by the commenter (page 163, paragraph 4) refers to the federal ambient air quality standards. This section of the draft EIS/EIR is correct in stating that the eastern portion of the Southeast Desert Air Basin is designated as either an attainment or as an unclassified area for all criteria pollutants with regard to federal ambient air quality standards. The comment stating that the Southeast Desert Air Basin is "currently in non-attainment for PM-10 and for ozone" is correct with regard to *California* ambient air quality standards which involve lower thresholds. The draft EIS/EIR acknowledges the designation of the SEDAB as a nonattainment area with regard to the state standards for PM10 and ozone (see the draft EIS/EIR, pages 165-166, and Appendix E, pp. 11 and 35).

9. The section of the draft EIS/EIR cited by the commenter (page 163) discusses the general relationship between the lack of ambient air quality data in remote areas and an "unclassified" designation with respect to federal air quality standards. This section of the draft EIS/EIR does not state that "there are no monitoring stations in the eastern portion of the SEDAB." The data cited by the Park Service are not readily made available to the general public by the California Air Resources Board, which performs quality control checks on and compiles all data from all monitoring stations in the state of California for purposes of attainment/nonattainment designations.

10. This comment does not address the adequacy or the accuracy of the draft EIS/EIR, and therefore, no response is necessary.

11. As discussed in Response 0147-3 above, the revised modeling using weather data collected on-site has been completed and the results show that project impacts at Joshua Tree National Monument will not exceed federal Class I or II increments.

12. This comment does not address the adequacy or the accuracy of the draft EIS/EIR, and therefore, no response is necessary. See Response 0147-9 above.

13. Figures FEIR-AQ-4, 5, and 6 (included in Appendix M, Attachment 2 of the final EIS/EIR) show PM10 ambient concentrations for the South Coast Air Basin, Southeast Desert Air Basin, and the Coachella Valley. The information is based on monitoring data collected through 1990.

14. Visibility data from airports located in the Coachella Valley were not used for the visibility trend analysis in the draft EIS/EIR because these data are not available from the National Climatic Data Center on computer tape. Therefore, visibility data from the Riverside and Ontario airports were used for the analysis.

15. As discussed in Responses 147-3, 7, and 11 the revised modeling using weather data collected on-site has been completed and the results show that project impacts at the Joshua Tree National Monument will not exceed federal Class I or II increments.

    Additionally, as discussed in Response 0147-6, due to the nature of the regional ozone problem in the desert, it is not likely that emissions of ozone precursors from the Eagle Mountain project will result in impacts within the boundaries of JTNM. Finally, due to the lack of an adequate modeling tool, it is impossible at this time to quantify ozone impacts from the proposed project.

16. As noted in this comment, this response acknowledges that indirect impacts to tortoises in the Pinto Basin portion of Joshua Tree National Monument could potentially occur from increased raven populations. This language has been added to the Biological Assessment prepared for the Section 7 consultation as required by the Endangered Species Act (see Appendix N of the final EIS/EIR).

17. While coyote and kit fox may be attracted to the landfill, it seems likely that this will be a relatively localized phenomenon. Research on the effect of a cattle carcass dump-site on coyote movements has shown that while coyotes may come from as far as 15.3 kilometers to utilize this highly attractive food source, 95 percent of dump-site related coyote activity is within a 3- to 4-kilometer radius (Danner and Smith 1980). This distance represents the approximate distance from the proposed landfill to the boundary of Joshua Tree National Monument. This carcass dump-site was much more attractive to coyotes (i.e., large quantities of readily available meat, abundance of exposed carcasses for extended periods, little adjacent human disturbance) compared to the proposed landfill site, which will consist of processed and compacted trash, the application of a daily earthen cover over refuse, and the presence of human activity. It should also be noted that as part of the control for windblown trash, the active portion of the landfill will be fenced (draft EIS/EIR, page 515), which should at least retard access of these predators to the landfill.

18. As suggested in this comment, the discussion regarding recreational uses in the Pinto Basin portion of Joshua Tree National Monument (paragraph 4 on page 175 of the draft EIS/EIR) should reflect additional recreational uses including research, bird-watching, photography, hiking, and backpacking. Although summer activity does not cease, most of these activities occur during the winter.

19. The discussion on page 277 of the draft EIS/EIR addresses the existing conditions of the affected environment. Secondary visual impacts to Joshua Tree National Monument are discussed in the Environmental Consequences section of the draft EIS/EIR. Dust impacts can be found on pages 377-379 and 514-516. There would be no smoke generated from normal landfill operations.

20. Indirect impacts of the proposed project to Joshua Tree National Monument and other wilderness areas are addressed in the text of the draft EIS/EIR. Noise impacts are located on page 556; night lighting effects are discussed on pages 518-519; and dust impacts are found on pages 514-516. Although such impacts are adverse, no significant deterioration of wilderness values due to project operation would result.

21. The draft EIS/EIR states that ". . . summer rainstorms . . . in July and August . . . are intense and the prevailing directional winds from the south and southeast could scatter litter well into the Eagle Mountains, the Pinto Basin area, and beyond" (page 515). Having established the potential for intense winds, the draft EIS/EIR further discusses the project operation that would influence the amount of litter that might be windblown. Also, Appendix M, Attachment 7 of the final EIS/EIR contains atmospheric data collected on-site that accurately portrays weather patterns of the area.

    It should be noted that the project's operation is quite different from conventional landfills. All waste entering the landfill must be processed for materials recovery and recycling away from the landfill and compacted into closed containers which must remain closed until the containers are opened near the face of the landfill. The waste will come out of the containers in large clumps or plugs and be spread by a compactor tractor. This refuse will be pushed to the face of the landfill where it will be compacted and covered with at least six inches of soil. This process will minimize the opportunity for the wind to pick up litter. Additionally, portable litter fencing at each cell will catch windblown litter.

    Next, full-time personnel will be assigned to litter control. Because the landfill site is quite large, the operator will be able to contain windblown litter within the site boundaries by intensifying the labor effort when necessary. The operator is committed to preventing any litter from leaving the landfill's boundaries. Moreover, there is a large area within the Eagle Mountains which can be patrolled for litter prior to litter entering the monument. Also, a helicopter search for blown litter in the vicinity of the project shall be performed every three months for the first five years of operation and as needed thereafter as agreed to by the operator and the BLM and NPS. An NPS employee shall be taken along as an observer for all periodic aerial litter searches. Finally, as a last resort, if Monument personnel determine that a problem from windblown litter is developing, they will call the landfill operator for timely removal of any litter which has entered the monument.

This procedure was initiated by park personnel during meetings held at the park in 1990. All costs will be assumed by the landfill operator.

Finally, as pointed out in the draft EIS/EIR (p. 270), the project area is separated from the Monument by a major ridgeline (elevation 2,000 feet -3,500 feet) which blocks views from the Monument into the project area. This ridgeline can also pose as a natural barrier to windblown debris, allowing for litter control to occur prior to the Monument boundaries. Also, the discussion below accounts for the storm warning system that would allow for the closing of landfill operations and the cover of litter prior to the arrival of a potentially windy storm.

There is no question that windblown dust poses a significant impact. This impact is clearly identified in the draft EIS/EIR (377, 378, 411, and 413). The potential for transport of fugitive dust is acknowledged. The most important receptor in this regard is the Joshua Tree National Monument boundary. Impacts to the ambient concentrations at the monument boundary are presented in Table 34 in the draft EIS/EIR.

Regulation IV, Rule 403, specifically states that ". . . a person shall not cause or allow the emissions of fugitive dust . . . such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source . . . ." The rule also says that ". . . every reasonable precaution [shall be taken] to minimize fugitive dust emissions from . . . solid waste disposal operation." Suspension of activity during winds in excess of 25 miles per hour was not considered as a separate mitigation measure since virtually all sources of fugitive dust would have active dust control programs applied to them.

Implementation of the design features listed on pages 515-516 of the draft EIS/EIR would ensure that impacts due to windblown debris and dust would be below a level of significance.

22. Implementation of the design features listed on pages 515 and 516 of the draft EIS/EIR, such as daily cover and compaction, would ensure that the impacts due to windblown debris would be below a level of significance. No additional mitigation would be required. The mitigation requiring that the landfill operator respond to a call from personnel at the monument when a problem of windblown debris is identified originated during consultation with JTNM staff. The intent was to allow the monument staff to control who went into the monument and when, due to consideration for "fragile desert soil crusts and sensitive flora."

23. Although claims on the iron deposits at Eagle Mountain have existed since 1881 and have changed ownership several times, regular shipments of iron ore did not commence until after purchase of the claims in 1944 by Henry J. Kaiser and completion of a rail line in 1948. Although some mining activity occurred prior to 1947, construction of the Kaiser

iron ore mine operation started in 1947. Thus, all of the substantial mine activities have occurred in the last 50 years.

24. According to a 1971 Bureau of Mines Information Circular, Eagle Mountain "has accounted for more than nine-tenths of the State's (California) production." However, many other deposits exist on the West Coast and include Clealum River, Kittitas County, Washington; Skagit Valley, Skagit County, Washington; Pit River near Redding, Shasta County, California; Gold Valley, Sierra County, California; Minaret, Madera County, California; and Iron Mountain, Cave Canyon, Providence Mountain, and Newberry, San Bernardino County, California. Others of minor importance are located in Washington, Oregon, and California. Many of these deposits have been mined since before 1900 and provided ore for furnaces dating to the late 1800s and early 1900s.

    The steel industry in the U.S. began in the 1800s and was well-developed by the turn of the century. The above-mentioned ore deposits and associated furnaces and mills possessed potential for the developing steel industry at the time. Although the Kaiser Eagle Mountain Mine, constructed in 1947, accounted for a major percentage of the state of California's iron ore production in 1971, it does not possess importance related to the industry's development. This conclusion was not contested either by the County of Riverside, Department of Parks and Recreation, or by the State Historic Preservation Officer during the public comment period of the draft EIS/EIR.

25. Since the mine and railroad postdate the development of the steel industry, more appropriate mine sites exist which address historic issues related to the development of the steel industry on the West Coast. Classifying such a complex or portions of it as "historical" is not expressly within the National Register criteria.

26. The dimensions of the proposed chimney will be roughly similar to the current adit opening. Ventilation through the adit openings is already poor, and the extension is not expected to significantly decrease it. Additional ventilation shafts can be dug into the tunnel system, but there is the chance that this will alter the temperature and humidity conditions that bats require within the tunnels. In addition, as noted in this comment, the leaf-nosed bat is not listed as a threatened or endangered species.

DOCUMENT 0148 Letter from Metropolitan Water District of Southern California, September 24, 1991

1. Although the Metropolitan Water District is not a regulatory agency and no decision is required of the agency prior to approval of the proposed project, the final EIS/EIR states that written approval of the MWD is required wherever the proposed project's improvement cross an MWD right-of-way. The language is contained in Section I.C. of the final EIS/EIR (see item 9).

2. The Eagle Mountain Road Extension will cross the Colorado River Aqueduct (CRA) in the existing Kaiser Truck Trail 200-foot right-of-way. The aqueduct is covered in this location. Copies of the final road design and detailed plans have been forwarded to MWD for review. All drainage facilities will be reviewed and approved by MWD prior to construction.

3. The waste screening/inspection facility at the Phase II container handling yard is discussed on pages 39-40 of the draft EIS/EIR. This area will process only locally generated waste and provide a location for random container load-checking. This amounts to no more than two to three tons of waste per day. All other waste would be compacted and compressed into the containers and delivered to the working face of the landfill in closed containers, thereby reducing the risk of windblown debris falling into the open portion of the aqueduct to below a level of significance. It should be noted that the waste screening/inspection facility within the Phase II container handling facility will be required to be enclosed.

4. Waste will be brought to the landfill in closed containers. The waste will have been inspected for hazardous materials and sorted for recyclables at a MRF located off-site prior to being transported to the site. The incentive and potential for illegal dumping will occur prior to the waste arriving at a MRF, not at the Eagle Mountain landfill.

5. While the proposed rail terminus would be located within 1500 feet of an open section of the CRA, all the waste would be compacted and confined to a closed container prior to arriving at Eagle Mountain. The rear closure of the container is a tightly fitting latched door that will prevent the escape of refuse. Furthermore, the closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. Therefore, the risk of contaminating the CRA from windblown debris would not exist.

6. The waste container maintenance facility (located in Planning Area No. 3) and recyclable material stockyard (located in Planning Area No. 4) are separated from the CRA by an existing 40-foot berm. Recyclables will be stored in closed containers, thereby minimizing any risk of contaminating the CRA from windblown debris. In addition, the recyclable storage area will be inspected on a weekly basis to remove any windblown litter that may have accumulated. The container maintenance facility drainage system is designed to be self-contained so that all of the wash water will be properly treated and reused for additional washing and dust abatement. The CRA will not be impacted.

7. No drainage from the proposed project will be directed toward the open Colorado River Aqueduct. Drainage outlets and other upstream facilities will be designed and sized to minimize velocities and reduce erosion. Additionally, drainage runoff from active landfill and operational areas will not be directly mixed with drainage from natural areas. Runoff from areas of potential contamination will be directed to detention facilities,

tested, and treated prior to release in accordance with current state and federal regulations. Waste oil in runoff will be separated and/or treated by preengineered treatment facilities immediately adjacent to the detention areas. In accordance with National Pollutant Discharge Elimination System (NPDES) standards, all potentially hazardous discharges will be tested and monitored. Where drainage is planned to cross the covered portion of the aqueduct, MWD will be consulted as to design and location. Copies of the drainage report and detailed plans have been forwarded to MWD for review. All drainage facilities for conveyance of flow over the covered aqueduct will be reviewed and approved by MWD prior to construction.

8. Please see Response 0148-7 above.

9. Please see Response 0148-7 above.

10. Subsequent to the preparation of the draft EIS/EIR, the truck traffic to the project site was reduced from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100). This modification to the proposed action is described in Section II.B.2 of the final EIS/EIR. This would account for total traffic on Eagle Mountain Road and its extension of up to 285 daily trips. Because this increase is but a small fraction of the road's design capacity, the road would operate at LOS A. This is not considered a significant traffic impact. For a discussion of noise and traffic impacts to the MWD pump station residents as a result of the proposed truck traffic, please refer to Response 0027-57.

11. Caltrans has no records of the numbers of delays or the length of delay due to high winds on eastbound trucks on the Indio grade. In the event of this occurrence lasting for more than 24 hours, some congestion would be expected on Eagle Mountain Road and its extension. Nevertheless, the impact would not exceed the original proposed daily impact, which was not considered a significant traffic impact.

12. Construction of the Eagle Mountain Road Extension and site development at the mine could involve some short-term impacts to the MWD pumping station and the Colorado River Aqueduct. Most important and those discussed in the draft EIS/EIR are vehicle emissions and fugitive dust (pp. 372-3). These impacts are not considered significant. Emissions resulting from ongoing maintenance activities, however, would contribute to the overall emissions of the project and these are included within estimates of the project impacts." These project air emissions would remain a significant impact after mitigation is implemented (see pages 373 and 386 of the draft EIS/EIR).

    Also, construction noise impacts can be anticipated; however, they will be far less than those anticipated by noise generated by the hauling of waste by rail or truck or by on-site operations. These are not considered significant (see the draft EIS/EIR, pp. 558-560).

Construction traffic impacts are not considered significant. For a complete discussion of the project impacts to the MWD pumping station please see Responses 0027-57.

13. The CRA is covered at the points which the Eagle Mountain Road Extension and the Eagle Mountain rail line will cross the aqueduct. The nearest uncovered portion of the CRA from this point is 18,000 feet (roughly 3.4 miles). As described in Response 0148-5, the waste will be compressed and confined to closed containers during transport to the site. Liquid waste is prohibited from the landfill and hazardous wastes will have been sorted from the waste stream at an MRF. Therefore, the potential for waste entering the aqueduct at these crossings is nonexistent.

14. The CRA is covered at the point which the Eagle Mountain rail line will cross the aqueduct. For present track conditions, proposed improvements, and maintenance of the Eagle Mountain rail line, see Response 0017-6. The proposed rail operations are compared to those during the previous mining activities in Response 0017-9. The Kaiser Steel mine used the rail line for 40 years without damage to the CRA. The trains were twice as heavy as the proposed train use. During the mine uses, the weighted trains traveled downhill, adding to the potential for derailment and extensive damage resulting from lengthy breaking time. The proposed use is for the weighted train to travel uphill, making the potential for damage from derailment less. In addition, all refuse transported by train would be contained in closed intermodal shipping containers. The rear closure of the container is a tightly fitting latched door that will prevent the escape of refuse. Furthermore, the closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. For these reasons, no damage to the CRA would occur.

15. See Response 0001-17.

16. The only bird which may be attracted to the landfill and possibly contaminate the CRA is the raven. A raven monitoring and control program is described on pages 450-451 of the draft EIS/EIR. The proposed mitigations to control the availability of food and refuse for birds would reduce potentially significant impacts to below a level of significance. See Response 0095-2b.

17. While coyote and kit fox may be attracted to the landfill, it seems highly likely that this will be a localized phenomenon. The CRA is not located on any migratory pathway. Therefore, any slight increase in wildlife activity would not impact the CRA in any significant way. Also, because of existing fencing along those portions of the aqueduct, any impact from coyote or kit fox on the CRA would be minimal.

18. The process of depositing refuse at the landfill is described on page 57 of the draft EIS/EIR. In summary, the compacted refuse will be taken to the working face of the

landfill in closed containers. The refuse will then be emptied from the containers, spread, and compacted, and finally, a minimum six-inch daily cover would be emplaced. As a result of this process, refuse would not be readily exposed to animals. Also, see Responses 0148-16 and 17 above.

19. The Riverside County Planning Department has on record a letter received from James O. Wallace, Agricultural Commissioner and Director of Weights & Measures, dated April 10, 1990. It states "that the provisions stipulated for the landfill operation at Eagle Mountain would not contribute to the artificial spread of a quarantinable pest [e.g., Mediterranean fruit fly (Medfly)]." The risks of contamination to the Colorado River Aqueduct from malathion spraying are virtually nonexistent (see Response 0027-58).

20. For a discussion of the issues presented in this comment, see Response 0001-18 for leachate leakage into fractured rocks; Response 0001-36 for the eastward movement of groundwater; and 0001-43 for groundwater overdraft concerns. Response 0001-33 outlines the groundwater protection measures pursuant to Chapter 15 requirements and evaluating leachate production values; Section II.B.1 of the final EIS/EIR describes the characteristics of the liner and the leachate collection and removal system; the groundwater monitoring plan is described in Response 0002-5; and the mitigation measures for groundwater contamination are identified in Appendix K of the draft EIS/EIR. Also, refer to the Mitigation Reporting/Monitoring Program in Section II.C. of the final EIS/EIR.

21. See Responses 0073-1a and 1b and 0002-4 through 38.

22. This comment is correct. Ongoing post-closure monitoring is expected to continue for 30 years after the final closure of the landfill, unless this time frame is modified by the Regional Water Quality Control Board, the County Integrated Waste Management Board, or the Local Enforcement Agency. See Responses 0073-1a and 1b and 0002-4 through 38.

23. As suggested in this comment, the following information reflects an addition to the information regarding the Metropolitan Water District (page 191 of the draft EIS/EIR).

> The Metropolitan Water District of Southern California (Metropolitan) is a public agency created by a vote of the people within its service area in 1928 following enactment of the Metropolitan Water District Act, to provide supplemental water for cities and communities on the south coastal plain. Metropolitan's service area comprises 5,143 square miles and includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Metropolitan's 27 member agencies consist of 14 cities, 12 municipal water districts, and one county water authority. Metropolitan is governed by a 51-member Board of Directors

representing the member agencies. Historically, Metropolitan has provided an average of 52 percent of the water used by approximately 15 million people now residing within the service area. Metropolitan imports water from two sources: the Colorado River via the Colorado River Aqueduct, and the State Water Project via the California Aqueduct.

24. As suggested in this comment, this response acknowledges filling of the Salton Sea basin between 1905-1907, rather than 1905-1915 as stated in the draft EIS/EIR (page 305, paragraph 1).

25. As suggested in this comment, this response reflects that the Colorado River Aqueduct (instead of the Los Angeles Aqueduct as stated on page 305, paragraph 2 of the draft EIS/EIR) was one of the major undertakings of the region.

26. In an effort to conserve water consumption, waste water, including truck wash water, will be reclaimed by the project and used in dust control on unpaved roads.

27. Leachate recovered from the landfill (if any) will be subjected to testing and treatment prior to use as a dust control medium or disposal. The testing procedure will determine the presence of soluble metals, volatile organics, dissolved or floating oils and greases, BOD, COD, pH, and other parameters. Primary treatment will consist of settling for the removal of suspended particulates followed by passage of the liquid through an oil separator for the removal of floating oil and grease. If needed, secondary treatment will consist of air stripping to remove VOC, treatment with lime for the precipitation of heavy metals, and aeration for BOD and COD control. At all stages of treatment, tests will be conducted to determine the efficacy of the treatment process. Recovered contaminants will be collected and stored and, if required, handled as hazardous waste for treatment off-site. The effluent will only be used for dust control if it meets the standards for this use that will be established by the LEA during the permitting process. An alternative method of handling leachate/condensate will be to collect and store it for off-site treatment and disposal. All appropriate regulations for the handling of hazardous materials will be observed.

DOCUMENT 0149 Letter from Barbara Fine, September 24, 1991

1. First, it is unclear why the commenter thinks it is necessary to analyze a single hypothetical transfer station/intermodal facility. Second, it is unclear what the commenter means by "additional impacts." The draft EIS/EIR discusses air emission impacts from a single transfer station (see Appendix E, pp. 72-73). In addition, the draft EIS/EIR discusses air emission impacts from rail haul along the Southern Pacific tracks (see Appendix E, pp. 72-76).

Finally, Appendix E, pp. 93-95, of the draft EIS/EIR discusses the ambient impacts associated with a single train passing a rail crossing. This analysis includes impacts from the diesel locomotives as well as from the motor vehicles waiting at idle as the train passes by. In order to convert the maximum 1-hour average impacts shown in this analysis to corresponding 24-hour average impacts, it is necessary to divide the 1-hour value by 24 (assuming that one train passes this point each day). Annual averages can be calculated from the 24-hour average concentrations through the use of recommended EPA and Air Resources Board conversion factors.

Based on the information contained on Table 30 (page 96) of the draft EIS/EIR, the 1-hour averages for CO and NOx would be 323 $\mu g/m^3$ and 143 $\mu g/m^3$, respectively. The 24-hour and the annual averages, as well as the methods used to calculate said averages, are given in Table FEIR-AQ-12 (see Appendix M, Attachment 2, of the final EIS/EIR).

2. See Response 0149-1 above for a discussion of ambient impacts resulting from rail transport. The comment is incorrect in regard to the number of diesel locomotives used to pull each train. As discussed on page 76 of Appendix E, the draft EIS/EIR reports that emissions would emanate from an estimate of four diesel locomotives needed to pull each train for the rail-bound trip from the Los Angeles basin to Ferrum Junction along the Southern Pacific line. On the return trip, the draft EIS/EIR accounts for emissions from two diesel locomotives pulling each train.

3. See Response 0117-6 for a discussion of the air quality benefits associated with the electrification of the Eagle Mountain rail line. See also Response 0117-7 for a discussion of electrification of the Southern Pacific railway as a mitigation measure.

4. Unlike the impacts to air quality, impacts due to noise generated by landfill operations are considered not significant beyond the boundary of the project. See the noise contour for landfill operations on Figure 99 of the draft EIS/EIR. Therefore, any reductions in noise generation would not be discussed in the worst-case analysis of project noise.

5. The landfill will not operate during nighttime hours. Potential ways to reduce project emissions, such as electrification of the Eagle Mountain railway and landfill equipment, are discussed on pages 380-381 of the draft EIS/EIR. These mitigation measures are not feasible at this time, but will be incorporated into the project as this technology becomes available. See discussion on page 386 of the draft EIS/EIR.

6. Page 529 of the draft EIS/EIR says that "Additional water truck *trips* [emphasis added] would be necessary." This is not a long-term solution, however. When the Specific Plan is developed for the townsite, an acceptable defluoridation plant will be required to treat the local water for drinking purposes.

7. See Response 0149-6 above.

8. The drainage improvements to protect the rail line are part of the proposed action. These improvements would be designed in accordance to the development standards stated in the Specific Plan, which include compliance with the requirements of the September 1984 MOU between Riverside County, the Riverside County Flood Control District, and the Water Conservation District as well as the requirements of the California Regional Water Quality Control Board.

   Drainage protection along the existing route of the Eagle Mountain rail line consists of dikes, ditches, culverts, trestles, and elevated road bed. These facilities have been designed to accommodate anticipated drainage flows which could impact the railroad. Runoff is either directed or allowed to pass under the railroad and returned to existing natural drainage channels.

   The proposed extension of the railroad will be raised approximately four feet or more above the natural ground. This will allow for the construction of drainage culverts designed to pass the anticipated runoff. Where necessary, parallel ditches will be designed to direct flows to the culverts. Riprap will be used as needed to prevent erosion of the rail bed.

9. Between State Beach and Ferrum, the Southern Pacific main line passes through and adjacent to two portions of the Salton Sea State Recreation Area; however, after the Eagle Mountain rail line leaves Ferrum Junction, it does not pass through any state recreation area. The two areas provide fishing opportunities in the Salton Sea. No formal facilities exist in these locations. The project does provide special design features and mitigation for the rail right-of-way passing through the BLM Areas of Critical Environmental Concern. These include the Salt Creek ACEC near Ferrum Junction and the Chuckwalla Bench ACEC south of I-10.

10. Even though Specific Plan #252 does not include the Eagle Mountain townsite, the draft EIS/EIR does address the direct and indirect environmental impacts on and the cumulative impacts of the townsite. The potential impacts on the townsite are discussed in the draft EIS/EIR in the following places:

    a. pages 320-323, groundwater contamination
    b. page 337, LFG migration
    c. page 341, surface fires
    d. pages 351-353, public safety
    e. Section C, Traffic and Transportation
    f. page 411, project air emissions
    g. pages 424-425, screening level health risk assessment

h. page 435, compatibility of land use
i. pages 442-444, drainage
j. Section H, Growth Inducement and Socioeconomics
k. pages 511-514, visual
l. page 515, windblown debris and dust
m. Section K, Utilities and Services
n. pages 552-559, noise
o. pages 585-588, cumulative

11. The generation of hazardous wastes on the site is expected to be from four sources: (a) hazardous materials recovered from the waste stream; (b) wastes such as solvent, used oil, and oil filters generated during the maintenance of vehicles and equipment; (c) by-products such as sludge and activated carbon cartridges; and (d) laboratory waste. As required by California and federal law, appropriate hazardous waste generator's licenses will be obtained. Intermediate storage of hazardous wastes, labeling, records, and manifesting for ultimate disposal at licensed hazardous waste facilities will be conducted according to the appropriate regulations and will be enforced by the appropriate agencies.

12. Recyclables sent to Eagle Mountain for interim storage while markets are developed or depressed will not be the property of the Eagle Mountain project but rather the property of the recycling firms or MRFs. These will be consigned for transportation and storage to Eagle Mountain by their owner. The owners will require return of this property when needed. Recyclable materials will not be landfilled. Due to the cost involved for shipping and storage of recyclables at Eagle Mountain, recyclers will have to weigh the cost of this against local storage, expatriation, or immediate use. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program (described in Response 0111-43) to ensure the adequate removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain.

DOCUMENT 0150 Letter from Dorothy A. Bailey, September 18, 1991

1. For a discussion on groundwater protection, please see Response 0001-25. The proposed project is a Class III solid waste landfill and as such would not accept any hazardous materials. The load-checking program to inspect and remove unacceptable substances from the waste stream before being transported to Eagle Mountain is described in Response 0111-43.

2. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0151 Letter from Harriet and Howard Allen, September 22, 1991

1. The proposed project site is located southeast of Joshua Tree National Monument and at its closest point is approximately 8,000 feet south of the boundary. The draft EIS/EIR points out the project will have no direct impact on the recreation values, uses, or opportunities for camping, hiking, backpacking, photography, wilderness use, or nature study at Joshua Tree National Monument. Noise impacts on JTNM and wilderness areas are discussed on page 556 of the draft EIS/EIR. Due to distance and the intervening barrier of the Eagle Mountains, noise levels from project operations would not be considered significant. Potential night lighting impacts on the national monument and wilderness areas will be reduced by implementing the proposed design features including limitation of night activities, type of lighting, and truck traffic routing. The potential for transport of fugitive dust is acknowledged in the draft EIS/EIR. The most important receptor in this regard is the JTNM boundary. Impacts to the ambient concentrations at the monument boundary are presented in Table 34 in the draft EIS/EIR. The only impacts to wildlife in JTNM involve a possible increase in the raven population at the landfill site. If there is a significant increase in raven population, this could impact tortoises as well as other potential prey species in the monument. Both passive and active raven control programs will control this potential impact.

2. See Response 0151-1 above.

3. The project is southeast of JTNM and at its closest point is approximately 8,000 feet south of the boundary. The project will have no direct impact on JTNM with respect to its recreation values, uses, or opportunities for camping, hiking, backpacking, photography, wilderness use, or nature study. Measures to control windblown debris associated with landfill operations are addressed in Section IV.J.4 of the draft EIS/EIR. Also, see Response 0026-9. In the event that JTNM or BLM staff observe or receive reports of problems developing with windblown debris, there will be MRC operations personnel assigned to litter control that can be contacted to ensure the timely retrieval of stray litter.

   It is possible that the proposed landfill will attract ravens. Some of these could possibly impact the desert tortoise in Joshua Tree National Monument, as well as other potential prey species. A raven monitoring and control program is proposed to mitigate this potential impact (Appendix F, pages 70-71). Measures to control other vectors, birds, animals, and insects attracted to the site include the application of a daily earthen cover, barriers, and explosive noises (see page 345-347). Also, see Response 0097-2b.

4. See Response 0148-7.

5. Measures to protect Joshua Tree National Monument are provided throughout the draft EIS/EIR and are summarized in Responses 0151-1, 3a, and 3b.

DOCUMENT 0152 Letter from Skadden, Arps, Slate, Meagher & Flom, September 23, 1991

1. The commenter notes that they obtained a FERC preliminary permit on May 29, 1991. However, under the FERC opinions, at the preliminary permit stage, the plans of FERC applicants such as the EMEC are considered speculative and rarely offer substantiated information [56 FERC 61,146 (July 26, 1991); 49 FERC 61,380 (December 21, 1989); 45 FERC 61,188 (November 2, 1988), 32 FERC 62,189 (July 22, 1985)]. In fact, EMEC's first Semi-Annual Compliance Report contains numerous statements which indicate the speculative nature of the project. For example, page 1 of that report states:

> It has been difficult to obtain information needed to conduct the required *preliminary* design engineering for the underground features of the project and to initiate initial consultation with the agencies *without having a fully defined project* [emphasis added].

Likewise, page 2 states that the report is based on an assumption that favorable underground conditions for tunneling and power house excavation would be found. In addition, at page 36 under the economic analysis, the document states:

> Because of the difficulty of accomplishing this task *in advance of a complete system description*, . . . an alternative method of assessing the economic viability was investigated [emphasis added].

Likewise, EMEC's August 16, 1991 document concerning first stage consultation states:

> The purpose of the preliminary permit is to maintain priority of application for a license during the term of the permit while the permittee conducts investigations and secures *the data necessary to determine the feasibility* of the project [emphasis added].

Under CEQA, when the nature of future development is nonspecific and uncertain, an EIR need not engage in "sheer speculation" as to future environmental consequences. If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

Concerning cumulative impacts, the CEQA guidelines state:

> The discussion of cumulative impacts shall reflect the severity of the impacts *and their likelihood of occurrence* [emphasis added] . . . [14 CCR 15130(b)].

The cumulative impact section must discuss reasonably foreseeable probable future projects producing cumulative impacts. In this case, however, the commenter's proposed pump/storage project is speculative and, thus, not a reasonably foreseeable probable future project.

Likewise, under NEPA, federal agencies need not consider alternatives of speculative feasibility or speculative impacts.

The EMEC's project's feasibility is unknown at this point. That project is, therefore, considered remote and speculative under CEQA and NEPA and is not discussed in detail in the final EIS/EIR.

In addition, although under CEQA, projects under formal environmental review must be discussed in a cumulative impact analysis, the subject EMEC project will only begin the NEPA environmental review process once EMEC files a license application for the project, which application will not occur for another several months, if ever.

Therefore, this comment does not alter the conclusion of the draft EIS/EIR that the EMEC project is "speculative and remote and not reasonably foreseeable" (page 586).

2. See Response 0152-1.

3. See Response 0152-1.

4. Statements concerning Riverside County's stand on the project do not address the accuracy or adequacy of the draft EIR/EIS; hence, no response is necessary.

5. See Response 0152-1.

6. The EMEC project will be subject to separate NEPA and CEQA review should it ever be proposed. That project, and all attendant impacts, will accordingly be examined and addressed at some later time. The EMEC project need not be factored into a cumulative impact analysis and need not be fully addressed in the draft EIS/EIR from that standpoint because it is not a past, present, or "reasonably foreseeable probable future project" for the reasons discussed in the draft EIS/EIR (CEQA Guidelines Section 15355).

7. See Response 0152-4.

8. See Response 0152-4.

9. See Response 0152-1.

10. The commenter's request that the hydroelectric project be discussed in the alternatives analysis of the draft EIS/EIR indicates a misunderstanding of the requirements of CEQA and NEPA. CEQA only requires that an EIR "describe a range of reasonable alternatives to the project. . . *which could feasibly attain the basic objectives of the project* [emphasis added] and evaluate the comparative merits of the alternatives" [CEQA Guidelines, Section 15126 (d)].

    The basic objective of the project proposed by MRC is to develop a new Class III waste disposal facility to accommodate southern California waste disposal demands and to provide such capacity in a remote desert setting (draft EIS/EIR, page 4). The commenter's proposed alternative analysis of a hydroelectric project could not feasibly attain the basic objectives of MRC's landfill project, and, therefore, does not need to be considered in the alternatives section of the draft EIS/EIR.

11. See Responses 0152-1 and 0152-10.

DOCUMENT 0153 Letter from City of Beaumont, September 17, 1991

1. The proposed action is expected to be capable of accepting up to six unit trains per day at the container handling yard. To transport the amounts of solid waste from the geographic areas assumed for the analysis, an average of 4.7 shipments per day will be required when the project is operating at full capacity. Based on this description and counting return trips for the trains, an average of 9.4 trains per day will utilize the primary rail segment (with a maximum number of 12 trains per day on a round-trip basis), with fewer trains on each of the secondary segments. Proponents of the proposed action will arrange scheduling of refuse unit trains with Southern Pacific on a contractual basis to prevent any conflict between ongoing rail operations and trains being utilized for the landfill project.

   Noise measurements were taken for land uses within 100 feet of the corridor of the Southern Pacific rail line. It was determined that the addition of the project-generated train traffic to the existing train traffic would slightly increase (+0.7 dB) noise levels along the rail corridor. This increase that would be experienced by residential areas 100 feet from the Southern Pacific rail line is not considered significant because it is not discernible by humans. It should be noted that existing noise levels within 100 feet of the rail line corridor are 74 CNEL, which exceeds acceptable noise levels for residential uses. Also, see Response 0001-103.

2. MRC will arrange scheduling of refuse unit trains with Southern Pacific on a contractual basis to prevent any conflict between ongoing rail operations and trains being utilized for the landfill project (draft EIS/EIR, pp. 50 and 357).

3. The risks associated with train accidents are discussed on pages 351-352 of the draft EIS/EIR. The draft EIS/EIR (page 351) states that the project itself and the operation of off-site transfer stations to serve the project would not be expected to increase the frequency of accidents involving solid waste transport, when considered in terms of accidents per ton-mile of transport. In fact, emphasis on rail transport would tend to decrease the overall potential for accidents when compared with conventional truck transport of the same amount of solid waste due to the control and maintenance of the rights-of-way in which trains operate. An increase of a maximum of six trains per day over present rail operations would not affect the utilities adjacent to the railroad tracks.

4. An emergency response program for the Southern Pacific Railway is presently on file with proper authorities, including the health departments of Riverside and San Bernardino counties and the California Public Utilities Commission. No specific changes to this program would be necessary. A detailed description of Southern Pacific's Emergency Response Plan requirements is provided in Response 0026-3. In addition, as part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers to supplement Southern Pacific workers.

5. The existing train traffic conditions and delay times are discussed in Section III.C.1 of the draft EIS/EIR. The proposed project would add a maximum of 6 round-trip trains per day (12 one-way trips), consisting of one or more locomotives carrying up to 14 railcars. The delays caused by this increase in train traffic are discussed on Section IV.C.2 of the draft EIS/EIR, which concluded that the effects on delays at grade crossings would be relatively minor and are therefore not a significant impact.

6. The draft EIS/EIR states that the expected impact of the truck traffic associated with the project on I-10 is minimal. A total of 200 round trips, as originally proposed, on I-10 represents a two percent increase in the overall daily traffic volume in the immediate vicinity of the project and a much smaller percent as truck volumes on I-10 increase to the west. Furthermore, subsequent to the preparation of the draft EIS/EIR, the project has been modified to reduce truck traffic to the project site to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100) in three years. This measure would further reduce the effects on traffic and the potential for accidental spills. See Section II.B.2 of the final EIS/EIR for a discussion of the reduction in truck trips. Additionally, the refuse transported by truck would be compacted in closed shipping containers which are described in Response 0021-25. Due to the nature of the containers, it is unlikely that refuse would spill out of the containers in the event of an accident. The draft EIS/EIR does, nevertheless, address this possibility on pages 351 and 352.

7. Section IV.D.3 of the draft EIS/EIR does analyze the impacts of truck traffic serving the landfill. It is anticipated that of the 200 daily truck trips proposed in the draft EIS/EIR,

half would come from within Riverside County and the other half from San Bernardino County. All trucks would be required to use the Eagle Mountain Road Extension via Eagle Mountain Road under normal circumstances for shipment delivery. Please refer to pages 363-365 for a discussion of impacts to these surface streets. MRC has since proposed to a reduction in daily round trips to 100 trucks. A discussion of this project modification is contained in Section II.B.2 of the final EIS/EIR.

8. The draft EIS/EIR (pages 362-365) concludes that the expected truck traffic associated with the project on I-10 is minimal, representing a two percent increase in the overall daily traffic volume in the immediate vicinity of the project and a much smaller percentage as traffic volumes on I-10 increase to the west. This is considered an insignificant effect. Moreover, subsequent to the preparation of the draft EIS/EIR, truck traffic to the project site will be reduced to 100 round trips daily and to eliminate all but those trucks serving the desert cities (not to exceed 100) in three years (see Section II.B.2 of the final EIS/EIR). This measure represents a one percent increase in traffic on I-10 which further reduces traffic effects. Mitigation measures are not required for insignificant impacts.

9. Mitigation measures for air impacts from on-highway trucks are discussed in the draft EIS/EIR (see Appendix E, pp. 105-108).

10. See Response 0106-3.

DOCUMENT 0154 Letter from Dan Rothfolks, September 13, 1991

1. This comment does not address the accuracy or adequacy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0155 Letter from Seth Anthony Foster, September 10, 1991

1. This comment does not address the accuracy or adequacy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0156 Letter from City of Riverside, September 20, 1991

1. See Response 0015-2.

2. No alternative rail lines through the city of Riverside are proposed. If this action is required in the future, appropriate environmental review and public hearing notice would be required.

3. This comment does not address the accuracy or adequacy of the draft EIS/EIR, and therefore, no response is necessary.

DOCUMENT 0157 Letter from Erik Joki, September 19, 1991

1. This comment does not address the accuracy or adequacy of the draft EIS/EIR, and therefore, no response is necessary.

2. The draft EIS/EIR (page 105) states that other potential landfill sites in Los Angeles County, namely, Towsley Canyon, Blind Canyon, and Mission-Rustic Canyon, were not analyzed in further detail because of their limited capacities and because inadequate information is currently available regarding the description of projects at these sites. Consequently, they were deemed, at this time, to be remote and speculative.

3. This comment does not address the accuracy or adequacy of the draft EIS/EIR, and therefore, no response is necessary.

4. See Response 0015-2.

5. Please refer to Response 0102-16.

6. The controller/operator of the MRFs is unknown at this time. However, operations at the MRFs will be strictly regulated under the solid waste facilities management permit. This permit is issued by the State Integrated Waste Management Board, in conjunction with the LEA in whose jurisdiction the MRF is located.

7. The precise locations, designs, and operational details for future MRFs are unknown at this time. See Response 0015-2.

8. The project proposes a Class III nonhazardous municipal solid waste landfill which will only accept nonhazardous solid waste and inert wastes. The project design includes the inspection of waste to detect the presence of radioactive materials and other hazardous waste. Incoming waste will be screened and removed from the waste stream at both the MRF and the landfill site. The elimination of hazardous wastes from municipal refuse depends on compliance by the public with applicable regulations. Community efforts to provide residents a convenient way of disposing small quantities of hazardous household materials (batteries, empty paint cans, etc.) will further reduce the amount of hazardous materials entering the municipal solid waste stream.

9. A discussion of waste diversion programs, including green waste and composting to reduce the waste entering landfills, is discussed on pages 105-109 of the draft EIS/EIR.

Additionally, if AB 939, the "Recycling Bill" is to be effective, much of the green waste contained in the trash stream will be removed for composting.

10. The reader is confusing the detection and inspection process of incoming refuse for hazardous materials with the process to remove recyclable materials. A description of the waste screening process which will occur at the MRFs and transfer stations is outlined on pages 48 and 49 of the draft EIS/EIR. Screening for hazardous materials at the transfer stations would be conducted by spreading the waste on the tipping floor for examination by workers. Any unacceptable materials would be diverted for special handling in accordance with established procedures.

    After the waste has been inspected for the occurrence of hazardous materials, it may be processed, depending upon composition, for the removal of recyclable materials. Recyclable recovery may occur by manually removing bulky materials such as cardboard or wood from the waste while it is on the tipping floor. More sophisticated techniques for the removal of recyclables will include manual and mechanical processing of waste using shredders, picking belt conveyors, air and gravity separation devices, and magnetic and/or electronic separation equipment.

    A waste screening and inspection would also occur at a facility on or near the Phase II container handling yard for incoming local waste. This process (described on pages 39-40 of the draft EIS/EIR) would spread the refuse on a concrete tipping floor and visually inspect the waste for unacceptable materials. These materials will be segregated and stored in accordance with the appropriate regulations.

11. See Response 0002-8 for a detailed description of the load-checking program at the MRFs and transfer stations. Compliance with the standards of removal of hazardous materials at the MRFs will be enforced by on-site inspectors directed by and with the authority of the Local Enforcement Agency (Riverside County Department of Health).

12. The issue raised in this comment would not alter the conclusions of the draft EIS/EIR. The figure of 0.2 percent was taken from a study performed by the Los Angeles County Sanitation Districts on refuse derived from the same geographical area as that proposed for the Eagle Mountain project. Accordingly, the study is seen as valid, and no additional information is needed. MRC will only indirectly enforce compliance with operators for the removal of hazardous waste through the mechanism of not accepting residual waste unless the hazardous materials have been removed. See Response 0157-11 above.

13. See Response 0026-82. Also, to correct some misinformation, Eagle Mountain will not be the largest landfill in the world.

14. Please refer to Response 0026-82.

15. An evaluation of active faulting has been prepared for the site by geologist Richard Proctor, dated September 12, 1991, titled "Evaluation of Active Faulting at Eagle Mountain" and may be obtained from either the County of Riverside or the BLM project file. The project site is 34 miles from the nearest active fault, the San Andreas. A large seismic event is anticipated on the southern San Andreas fault during the 115-year life span of the landfill project. The project site will only receive low to moderate ground shaking (0.1 g [gravity]) from a large San Andreas event. See Response 0001-24. However, very strong ground shaking and surface rupture along the San Andreas fault is expected for the Coachella and Imperial valleys within the next 115 years. Such strong shaking and surface rupture would probably disrupt all transportation and utility corridors that cross the San Andreas fault near Indio. These include not only the Eagle Mountain railroad, but the Southern Pacific railroad, major highways, gas pipelines, buildings, and the All-American Canal. The Colorado River Aqueduct crosses the fault west of Desert Hot Springs. Because the refuse transported to Eagle Mountain via rail or truck will be containerized and will contain dry, nonhazardous materials, a derailment would be a relatively minor event. Response 0021-7 addresses the procedures to be implemented in the event of rail service interruption.

16. See Response 0157-15 above.

17. See Response 0001-21 above. 40 CFR 258.13 and CCR Section 2533(d) both require a 200-foot setback from a Holocene fault (less than 10,000 years old). The Eagle Mountain landfill is not located on or near any Holocene faults.

    40 CFR 258.14 defines a seismic impact zone as an area where the maximum ground acceleration will exceed 0.10 g in 250 years. Because this is virtually everywhere in California, Chapter 15 requires landfills to be designed to withstand the ground acceleration associated with earthquakes.

    The unstable area requirement in 40 CFR 258.15 is also related to the requirements of Section 2533(d,e).

    The Eagle Mountain landfill will be designed in conformance with California regulations for faulting, seismicity, and geologic change. See Response 0001-24.

18. This comment is correct. The permitting process will require the implementation of the applicable state and federal regulations which would assure that the liner design ensures the integrity of the liner during seismic events and the static loading of the refuse. The maximum probable earthquake acceleration at the Eagle Mountain site is 0.1 g. However, MRC plans to design all major facilities at the site to 0.2 g, or essentially double the state requirements. Please refer to Response 0001-24.

19. Please see Response 0157-18.

20. Please see Response 0157-18.

21. See Responses 0001-21 and 0026-82 above.

22. Project compliance with the requirements of the SCAQMD's New Source Review is discussed in the draft EIS/EIR (Appendix E, pp. 102-105). The need for emissions offsets is discussed in this section as well. The PM10 mitigation measures for the proposed project are also discussed in the draft EIS/EIR (Appendix E, pp. 105-131). See Table FEIR-AQ-2 included in Attachment 2, Appendix M of the final EIS/EIR, and Response 0117-4 for a comparison between the mitigation measures recommended in the Coachella Valley PM10 Plan and the mitigation measures included in the draft EIS/EIR.

23. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

24. Railway electrification is discussed in Appendix E (pp. 116-117). Future electrification of the 52-mile stretch of track between Ferrum Junction and the landfill site was discussed in the draft EIS/EIR as potentially feasible. Mitigation Measure AQ-10 requires the preparation of a feasibility analysis of electrification at such time as there is sufficient landfill gas. Electrification of the Eagle Mountain rail line is not considered feasible at this time because of the steep grades and several major turns in the rail line. Also, the costs and physical disturbance necessary for the installation of the catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures. The electrification of the Eagle Mountain railway will be evaluated when sufficient landfill gas is generated to provide the required electrical energy. Table FEIR-AQ-5, included in Appendix M, Attachment 2 of the final EIS/EIR shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

    Electrification of the Southern Pacific main line was not evaluated as a mitigation measure because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. While at the present time both the California Air Resources Board and the South Coast AQMD are exploring ways to reduce locomotive emissions, including options for electrification of the Southern Pacific main line, the effects of such potential regulations are at this time considered remote and speculative.

25. The concern for PM10 generation at the site is warranted in all directions, not just during Santa Ana conditions. Mitigation measures to reduce the impacts from PM10 generation

are identified in the Mitigation Reporting/Monitoring Program (see Section II.C. of the final EIS/EIR). Two PM10 monitoring stations will be installed at the site to monitor and control PM10 generation rates during Santa Ana condition.

26. This comment quotes the draft EIS/EIR but does not address the adequacy or accuracy of the quotation and, therefore, no response is necessary.

27. See Responses 0001-11, 112, and 116 and 0073-2 above.

28. Water used for dust control will not be of sufficient quantity to add any moisture to the refuse. Dust control water use will be kept to the minimum necessary to control dust. Also, see Response 0073-2 above.

29. See Responses 0001-15 and 26 above.

30. See Response 0001-25 above.

31. See Responses 0001-15 and 0002-4 above.

32. The landfill design will comply with the new federal landfill regulations contained in 40 CFR 257 and 258, which were adopted after the draft EIS/EIR was published. EPA recently promulgated revisions to 40 CFR 267 and added 40 CFR 258 to the federal Criteria for Classification of Solid Waste Disposal Facilities and Practices. This new promulgation incorporates the final version of what is commonly called Subtitle D. The revisions to 40 CFR 257 essentially involve conforming changes that make this part consistent with the new Part 258. The new Part 258 sets forth new federal minimum criteria for municipal solid waste landfills (MSWLF). These new federal criteria were modeled after California's Title 23, Chapter 15, in many respects. The new regulations also include other requirements that are similar to other state regulations that apply to landfills.

33. The side wall liner will be constructed in 30- to 50-foot-high sections by building up horizontal layers of the various materials used for the different layers of the liner system and using refuse to support the final liner system once it is placed. See Response 0001-4.

34. See Responses 0001-25, 0073-1, and 0111-10 above.

35. See Response 0002-5 above. Yes, the proposed monitoring program meets the cited regulations.

36. See Responses 0148-2, 3, 4, 5, 6, 7, 8, and 9 above.

37. See Responses 0148-2, 3, 4, 5, 6, 7, 8, and 9 above.

38. See Responses 0148-2, 3, 4, 5, 6, 7, 8, and 9 above.

39. See Responses 0148-2, 3, 4, 5, 6, 7, 8, and 9 above.

40. See Response 0102-84.

41. For the reason stated in Response 0102-84 above, the conclusions of the draft EIS/EIR would not change.

42. This comment appears to be rhetorical in nature. It does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is necessary.

43. Because the Eagle Mountain rail line is a private rail road, higher standards for operation will prevail (see page 380 of the draft EIS/EIR).

44. The gross weight of a typical stack train carrying 3,500 tons of refuse in containers is approximately 5,900 tons.

45. The draft EIS/EIR (page 357) concludes that because the volume of rail traffic on the rail lines studied is expected to remain fairly static, at least through 1995, the project-related usage of rail transport is expected to have an insignificant impact on the rail lines and surrounding infrastructure (Kava, 1/1/90).

46. The point of this comment is not clear, and thus, no response can be provided.

47. Neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. It is unclear what protection this mitigation would afford the public or the environment.

48. The East Pit contains overburden and coarse tailings. The bottom of the East Pit has been dry since the summer of 1991. Currently, groundwater levels are approximately 12 feet below the lowest elevations of the deepest portion of the East Pit.

49. The draft mitigation monitoring program appears in Appendix K of the draft EIS/EIR. This program has since been updated and the replacement Mitigation Reporting/Monitoring Program can be found in Section II.C. of the final EIS/EIR.

50. The EIR Checklist was completed by the County of Riverside Planning Department and is in the project file in the Riverside Office of Planning.

51. See Response 0111-43 and 0002-8 for a discussion of the load-checking program.

52. See Response 0021-7.

53. As the Local Enforcement Agency, the Riverside County Department of Health would be responsible for monitoring the amount of waste entering the landfill.

54. See Response 0021-27.

55. The issues of operator liability, financial responsibility, closure and post-closure funding, and the like are issues which are addressed between MRC and the County of Riverside and in the waste discharge requirements permit issued by the Regional Water Quality Control Board and the landfill facilities permit to be issued by the Riverside County Local Enforcement Agency with the concurrence of the California Integrated Waste Management Board. Before any operations at the landfill can commence, financial responsibility will need to be demonstrated by MRC for third-party liability, closure and post-closure maintenance of the site, financial assurances necessary to ensure corrective action for potential groundwater contamination, and full indemnification of the County of Riverside. MRC intends to contract with users of the landfill (municipal and private) for indemnification of itself and the County of Riverside for any liabilities resulting from the deposit of waste at the site generated by such user. This intention will be embodied in any final Development Agreement approved by the County for the project.

56. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no comment is necessary.

57. See Response 0021-19.

58. The transport of recyclable materials to the site for which there is no immediate market will occur on one of the six train transporting solid waste to the site. When conditions favor returning the recyclables to their owner, they will be placed on one of the six empty trains returning from the landfill. No additional trucks or trains will be used to transport these recyclable materials to and from the site. The impacts resulting from transport of these recyclables to and from the site are included in the proposed action evaluated in the draft EIS/EIR. No additional impacts would result.

59. In an effort to achieve the goals of AB 939, the removal of green waste contained in the trash stream may take place at the transfer stations for composting. The green waste will not be considered a recyclable for shipment and storage at Eagle Mountain.

60. Composting of green waste would not occur at Eagle Mountain. See Response 0157-59 above.

61. In the event of rail service interruption, several scenarios are possible depending on the location and nature of the delay. Refuse could be transported by rail from the transfer stations to other landfills in the area until service to Eagle Mountain is resumed. Another option would be to temporarily transport the refuse to the Eagle Mountain landfill via truck. See Response 0021-7.

62. The waste proposed for Eagle Mountain will only pass through the Coachella Valley en route to Eagle Mountain. The draft EIS/EIR discusses impacts of the proposed project on nearby communities, including the issues of growth inducing and socioeconomics, and utilities and services. The increased population, employment, and income resulting from the operation of the proposed facilities would be considered a socioeconomic benefit to the surrounding communities, and the long-term operation of the landfill would lend stability to communities and sustain community services. Please refer to Section IV.H. of the draft EIS/EIR for a further discussion.

63. These documents are not normally included as attachments to a final EIS/EIR; however, they are available at the Riverside County Planning Department for public review.

64. The landfill design will comply with the new federal landfill regulations contained in 40 CFR 257 and 258, which were adopted September 11, 1991, after the draft EIS/EIR was published. The following provides a summary of both the state and federal landfill regulations and the compliance plan for Eagle Mountain.

    EPA recently promulgated revisions to 40 CFR 267 and added 40 CFR 258 to the federal Criteria for Classification of Solid Waste Disposal Facilities and Practices. This new promulgation incorporates the final version of what is commonly called Subtitle D. The revisions to 40 CFR 257 essentially involve conforming changes that make this part consistent with the new Part 258. The new Part 258 sets forth new federal minimum criteria for municipal solid waste landfills. These new federal criteria were modeled after Title 23, California Code of Regulations Chapter 15, in many respects. The new regulations also include other requirements that are similar to other state regulations that apply to landfills.

    40 CFR 258 establishes federal criteria for landfill siting, facility design and operations, groundwater monitoring requirements, corrective action requirements, financial assurance requirements, and closure and post-closure care requirements. The effective date of the new regulations is 24 months after date of publication (i.e., September 1993).

    The following review of 40 CFR 258 discusses the new federal regulations and draws comparisons between these new requirements and the requirements of Chapter 15 and other state laws and regulations that are similar. Also discussed are important comparisons with the Eagle Mountain landfill. Eagle Mountain landfill will have to comply with the requirements of both 40 CFR 258 and Chapter 15, whichever is more stringent.

Subpart A of 40 CFR 258 and Article 1 of Chapter 15 both establish the purpose, scope, applicability, and effective date for the regulations. Eagle Mountain landfill must comply with both the federal and state regulations, whichever is more stringent. Subpart A establishes that 40 CFR 258 is applicable to MSWLFs that accept waste on or after 24 months after the date of publication and partially exempts sites that stop receiving wastes within two years of the date of publication.

Article 1 establishes that Chapter 15 is applicable to all waste disposal sites, including MSWLFs (Class III) and hazardous waste sites (Class I). Article 1 includes an intermediate classification of designated waste (Class II). Article 1 establishes the requirements for the land disposal of all waste within the state of California.

Section 2510(b) of Article 1 also establishes provisions for engineered alternatives to the state regulations where the alternative is shown to meet the performance goal of the standards and where it is infeasible to comply with the standard.

Section 2511 provides for various exemptions to the state regulations. Exemptions include sewage sludges under certain conditions, recycling, some wastewater treatment facilities, sewage disposal regulated by other requirements, and disposal actions involved in a clean-up activity under the direction of a public agency.

Article 2 of Chapter 15 establishes criteria for classifying wastes in order to determine which siting and design requirements must be met to ensure protection of groundwater resources.

40 CFR 258.2 provides definitions of terms used within the regulations. Part 258.2 defines solid waste, house waste, nonhazardous industrial solid waste, and sludge. 40 CFR 258 does not include criteria for waste classification because it applies strictly to municipal solid waste. The disposal of other wastes, such as sludges and hazardous wastes, are regulated by other sections, such as 40 CFR 261.

The Eagle Mountain landfill will accept only municipal solid waste that is defined in 40 CFR 258.2 and in Section 2523 of Chapter 15. The site must meet the siting, design, operation, and monitoring requirements established in other sections of Chapter 15 for a Class III landfill as well as comply with the requirements of 40 CFR 258 because the site accepts MSWLF, as defined under federal regulations.

Section 2533(c) of Chapter 15 requires Class III landfill to be designed, constructed, operated, and maintained to prevent inundation or wash out caused by the 100-year flood event.

Eagle Creek currently flows into the east pit as the only available flood protection for the town of Eagle Mountain. However, the project will put Eagle Creek back into its natural course and provide the necessary flood protection for the town. In addition, the Eagle Mountain landfill is separated from Eagle Creek by the main haul road along the south side of the landfill. This road and the landfill area show no evidence of being inundated by any flood event and therefore do not meet the definition of a floodplain contained in 40 CFR 258.11(b)(1). The road and the landfill will be designed to meet the requirements of both state and federal regulations.

40 CFR 258.12 ensures that MSWLFs comply with other applicable federal regulations regarding projects located in wetlands. New MSWLFs shall not be located in wetlands unless a demonstration is made to the director of an approved state that essentially is the same as the required demonstration contained in Section 404 of the Clean Water Act. This includes showing that there is no less environmentally damaging alternative, no net loss of wetland, no jeopardy to endangered species, and so on.

Chapter 15 does not specifically preclude a landfill from being located in a wetland. However, some of the siting criteria in Chapter 15 and other state laws and regulations provide for an equivalent level of protection to wetlands as provided by the federal siting restriction contained in 40 CFR 258.12.

For example, Section 2530(c) requires that a landfill be sited, designed, constructed, and operated to ensure that all wastes will be a minimum of five feet above the highest elevation of groundwater. If a landfill is sited in a wetland, the construction activity associated with providing the necessary five feet of separation, and the impacts to wetlands resulting from this activity, can be regulated by the state as a discharge to waters of the state under the California Water Code.

The Eagle Mountain landfill is not located in a wetland. The water in the East Pit has dried out, indicating that this water is surfacing groundwater. The area where water ponded in the East Pit does not have the soil characteristics, flooding frequency, and vegetation, under normal circumstances, to be classified as a wetland. The U.S. Army Corps of Engineers may claim jurisdiction over the East Pit pond area and the actions involving the drainage improvements to Eagle Creek and require a Section 404 permit. The RWQCB has not indicated that they believe the East Pit pond is a wetland. They are more concerned about the requirement in Chapter 15 to provide a minimum of five feet of separation between the groundwater and the waste. The State Department of Fish and Game will require a Section 1603 agreement for the Eagle Creek drainage work but has not indicated that the East Pit pond is a wetland.

40 CFR 258.13 and Section 2533(d) both require a 200-foot setback from a Holocene fault. The Eagle Mountain landfill is not located on or near any Holocene faults.

40 CFR 258.14 defines a seismic impact zone as an area where the maximum ground acceleration will exceed 0.10 g in 250 years. This is virtually everywhere in California, which is why Chapter 15 requires a landfill to be designed to withstand the ground acceleration associated with earthquakes. Sections 2533(d,e) require a demonstration that the landfill containment structures are designed to withstand ground accelerations associated with the maximum credible earthquake and rapid geologic change.

The unstable area requirement in 40 CFR 258.15 is also related to the requirements of Section 2533(d,e).

The Eagle Mountain landfill will be designed in conformance with California regulations for faulting, seismicity, and geologic change.

40 CFR 258.20 requires a random checking of incoming loads to detect and prevent the disposal of hazardous wastes as defined in 40 CFR 261. This is the same as the requirement in Section 2523(b) of Chapter 15 requiring a periodic load-checking program.

The Eagle Mountain landfill includes a periodic load-checking program that complies with both state and federal regulations. Additionally, since most waste coming to the Eagle Mountain landfill will be processed at materials recovery facilities, this will provide for the checking of virtually all waste coming to the site and hazardous wastes can be removed at the MRF along with the other materials.

Both the state and federal regulations require at least six inches of daily cover of the refuse to control vectors, fires, odors, litter, and scavenging. The regulations both provide for alternatives approved by the state.

65. Any extension of the public comment period is voluntary and requires that the lead agencies, the County of Riverside, and the BLM grant such an extension.

DOCUMENT 0158 Letter from County of Riverside Department of Health, September 11, 1991

1. Excluding a catastrophic event, the longest period of time that waste will be expected to be stored in the intermodal containers from the point of loading at a MRF to unloading

at the landfill is 36 hours. Because the impact of a catastrophic event is unknown, an estimate of the time refuse might be stored in a container is impossible.

2. Potential odor impacts from the proposed project are addressed in Response 0001-97. The worst-case scenario used in the odor analysis assumed that the waste would sit for six to seven days.

3. This comment is correct. Prior to any mining operations, a CEQA document assessing the impacts of mining would have to be certified by Riverside County.

4. See Responses 0001-10 and 13.

5. The water supply is suitable for domestic uses other than drinking. Drinking water will be trucked into the site. If Kaiser or the project proponent proposes to put in a water treatment system so as to make the groundwater potable, this project would have to comply with CEQA. The cited water treatment facility is not part of the landfill project.

6. See Response 0158-5 above. The suggestion to use the Pinto Basin wells for drinking water will be considered.

7. This comment clarifies the potable water situation at Eagle Mountain. It does change the requirement that some sort of defluoridation plan must be made part of the facility plan for the town of Eagle Mountain. See page 530 of the draft EIS/EIR.

8. The Riverside County LEA has stated that checking for radon prior to commencement of operations is unnecessary.

9. See Response 0111-43.

10. See Response 0111-43. The specific role of Riverside County with regard to screening of hazardous waste will be similar to its present role with other county landfills. A major difference is that the County LEA will be empowered to inspect MRFs in wastesheds outside of Riverside County to ensure compliance with the inspection procedures. Development of the specific procedures to be used will be the responsibility of the LEA and MRC. These specific regulations and inspection protocol will be incorporated into the Report of Disposal Site Information which will require both LEA and CIWMB approval.

11. See Response 0111-43.

12. The draft EIS/EIR (pages 39 and 332) states that any waste generated from the local area will be inspected for hazardous wastes at an on-site waste screening/inspection station

located in the Phase II container handling yard. Local waste originating from Desert Center, Lake Tamarisk, and Eagle Mountain would be on the order of several tons per day.

13. The majority of the incoming solid waste will be inspected for hazardous materials at the initial loading point before it is transported to the landfill. However, any waste generated from the local area will be inspected for hazardous wastes at an on-site waste screening/inspection facility located in the Phase II container handling yard. The random inspections of loads coming from the transfer stations and MRFs would also take place at this facility. The waste screening and inspection process is described on pages 39 and 40 of the draft EIS/EIR.

14. It is not anticipated that MRC would become involved in the expansion of community-wide hazardous waste collection programs. Such programs are usually developed by the county or city from which the waste is derived or by the local hauler in those areas.

15. Any leachate that will be used for dust control or disposal by other means will be chemically tested to determine that it is nonhazardous as described in the draft EIS/EIR (page 65). See Response 0001-42 also.

16. The container handling yard will be paved with either blacktop or concrete as this is an area of high traffic. The paving will be used to reduce road and area maintenance and to reduce fugitive dust. It is not anticipated that significant quantities of oil or grease will be generated in these areas.

17. Hazardous wastes derived at the landfill (e.g., paints, fuel oil, and solvents from maintenance activities; the organic phases from leachate or landfill gas condensate; and small quantities of hazardous materials recovered from the on-site waste inspection facility) will be segregated and containerized as required by regulations and temporarily stored on-site. These wastes will be periodically removed from the site to a licensed hazardous waste facility by a licensed hazardous waste carrier under manifest as required by state law.

18. All above- and below-ground fuel storage facilities will be constructed, installed, and maintained in accordance with all applicable regulations including those imposed by the Riverside County Fire Department.

19. All employees who might be exposed to hazardous materials/wastes will be trained to the satisfaction of the Local Enforcement Agency to handle such materials.

20. A complete chemical inventory of reagents and other hazardous materials in use on the site will be established prior to the commencement of landfill operations. The required emergency plans associated with these materials will also be established.

21. All operating permits would be acquired prior to commencement of landfill operations. See Response 157-55 also.

DOCUMENT 0159 Letter from California Integrated Waste Management Board, September 24, 1991

1. The EIR for the Integrated Solid Waste Management System for Los Angeles County (August 1990:1-6) estimates that the current level of waste diversion in Los Angeles County is approximately 10-25 percent. More detailed quantification of waste diversion programs which may be available was not sought since it would not change the conclusion that Los Angeles County will experience a county-wide disposal capacity shortfall by the time Eagle Mountain is accepting waste (1993). Also, see Response 0021-27 and 0128-3 above.

2. See Response 0159-1 above.

3. See Response 0157-64 above.

4. Estimate of site capacity of 1.3 billion tons is incorrect. The only mention of site capacity for Eagle Mountain occurs on page 85, where it is cited to be over 100 billion cubic yards. This citation is also incorrect. The estimates for site life and capacity in the draft EIS/EIR were based upon a gross approximation of available air space, from small-scale maps, and the conceptual design for the landfill. See Response 139-20 above.

5. Initially, the composition of the municipal solid waste received at Eagle Mountain landfill will be similar to other Class III landfills in the state. However, the composition is projected to change due to the recovery of recyclable materials, as required by current state law. This future source reduction will occur at MRFs prior to loading the containers for transport to Eagle Mountain. This material recovery effort will reduce the quantity of paper, cans, bottles, green waste, and plastics that will be disposed of at Eagle Mountain.

6. It is not possible to identify the source of all refuse that will be sent to Eagle Mountain. The project description appendix states that the project would not accept incinerator ash or other wastes deemed unacceptable under current regulations (Appendix B, page 7-8). The nonhazardous nature of the refuse will be established by inspections conducted by the LEA. See Response 0111-43.

7. The mitigation measures used to keep hazardous wastes out of the landfill are described in the draft EIS/EIR, pages 39, 49, and 332-333. See also Response 0111-43.

8. The project would not receive incinerator ash and other unacceptable industrial waste. The potential impact to water quality associated with any ash and industrial wastes in the waste stream is the same as that for municipal nonhazardous solid waste. The sources of ashes and industrial wastes that will be accepted at the site are the same as the sources that currently dispose of their wastes in any of the Class III landfills throughout southern California. If an ash or industrial waste is currently being accepted for disposal at an existing Class III landfill and this landfill is closed so the waste is sent to Eagle Mountain, then this same waste will be disposed of at Eagle Mountain.

   Both state and federal law requires generators of wastes to be responsible for the classification of their waste and the proper management of their waste. All hazardous wastes, as defined by federal and state law, must be manifested from the point of origin to the point of disposal.

   Since the ash and industrial waste will be nonhazardous as defined by current law, there is no need for additional mitigation measures to address the potential adverse impacts of the disposal of these wastes. The site is designed to contain nonhazardous waste and prevent impacts of the disposal on groundwater.

9. Please see Responses 0001-111 through 116. Proposed drainage plans will divert runoff from the landfill and other working areas so as to allow the continued operation of the site. The draft EIS/EIR identifies these drainage improvements in a general sense by proposing to divert all runoff from the landfill area and put Eagle Creek back into the natural drainage, which will be redesigned to handle the required storm event. It is not proposed to alter the drainage in a manner that would intersect the mill tailing area as suggested by this comment.

10. Groundwater monitoring systems are designed to monitor the landfill to determine if the site is containing any leachate that may be generated. Understanding fracture flow will help in the placement of monitoring wells that will detect leakage from the landfill into the groundwater at the earliest possible point. Groundwater monitoring wells cannot do anything to prevent leachate from contaminating groundwater. The site design proposes a liner and leachate collection system that is designed to prevent leachate from contaminating groundwater. In the event that groundwater recovery becomes necessary, a corrective action program, including pumping of extraction wells to remove the groundwater, will be implemented in accordance with current regulations.

11. The on-site geologic faults act as partial barriers to "flow" across them, while the surrounding highly fractured bedrock acts as a collector/conduit for groundwater. The

faults will be beneficial to the groundwater monitoring system by being "good" locations for the drilling of monitoring wells.

12. Please refer to Response 0001-2 through 13.

13. Please refer to Response 0001-2 through 13.

14. Please refer to Response 0001-2 through 13.

15. Please see Response 0001-111 through 116. Both interim and ultimate drainage plans propose that storm flows will be routed around and away from the landfill, the existing fine tailing basins, and other working areas so as to allow the continued operation of the site. It is not proposed to alter the drainage in a manner that would intersect the mill tailing area.

16. Please refer to Response 0001-25.

17. See Responses 0001-111 through 116.

18. The liner will be designed to meet the minimum standards as required by Title 23, Chapter 15. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a low-permeability soil layer and a high density polyethylene flexible membrane will be placed over the entire area underlying refuse. See Section II.B.1 of the final EIS/EIR for a description of the modified containment system.

19. Surface runoff will be directed away from active landfill areas. Rain falling on the landfill sites will be routed to detention facilities, treated, and tested prior to release. No runoff from active landfill sites will be allowed to flow into the East Pit or to mix with other natural flows. Additional description regarding this separation is provided in the drainage report, which is included in Appendix L of the final EIS/EIR.

20. See Response 0157-64 above.

21. See Responses 0001-10 through 16, 25 through 27, 111 through 116, and 0073-2.

22. The draft EIS/EIR discusses wind erosion of disturbed areas and associated air quality mitigation measures and concludes that particulate emissions (dust particles) from wind erosion are expected to be negligible (see Appendix E, pp. 85-90 and 123-124). Hot desert conditions will prevail at the landfill site for about six months of the year. For a detailed discussion of odor and high temperatures, see Response 0001-97.

23. Potential for windblown debris and dust associated with the proposed landfill operations is addressed in Section IV.J.4 of the draft EIS/EIR. The design features listed on pages 515 and 516 would ensure that the impacts due to windblown debris and dust would be below a level of significance. Typical summer storms which could bring torrential rains and strong winds would be anticipated as part of the proposed project's storm watch/early warning procedure and the appropriate procedures would be implemented (see Response 0159-22 above).

24. Odor is not expected to represent a significant impact provided that all storage and transport containers and equipment are properly cleaned and maintained and that landfill operations are conducted in accordance with state regulations. For a specific discussion of odor, see Response 0001-97.

    In accordance with said regulations, transfer stations are required to have refuse removed every 48 hours or in accordance with an approved schedule. All containers and vehicles used to transport solid waste are required to be maintained in a good operating condition which avoids odors and other nuisances. At the landfill itself, installation of daily cover material, washing and equipment maintenance, and other measures to avoid odors and nuisances are required as part of the solid waste facilities permit. Periodic inspection by the Riverside County Department of Health (the Local Enforcement Agency) will insure that these conditions are followed. Thus, no specific mitigation measures, such as the use of chemical or physical odor suppressants, are deemed necessary.

25. The refuse would be compacted and loaded into the containers at the transfer station. The closed container would then be transported to the container handling yard and brought to the face of the landfill by self-dumping container handling vehicles. The containers will be emptied as close to the working face of the landfill as possible. Crawler tractors will push the refuse to the working face of the landfill where it will be spread and densely compacted. As the final elevation of individual cells is reached, the crawler tractor would roll and level the refuse, and the cover would be placed. The longest possible time that refuse could be left uncovered would be approximately 13 hours, that being the length of the daylight hours during the summer. The average length of time that refuse will be uncovered will vary depending upon the infill rate, the terrain configuration at the actual operating face, impending weather, and other operational variables. It is estimated that this period would be 6 to 7 hours.

26. An earthquake or flood which destroys a portion of railroad track which services the landfill is considered a catastrophic event in the Health and Safety section of the draft EIS/EIR. Containers en route to Eagle Mountain containing compacted waste could be diverted for storage at the MRF or transfer station of origin or off-loaded and sent to other local or regional landfills while the track is repaired. Prompt rerouting of the containers

would mitigate potential odor impacts to below a level of significance. For a specific discussion of odor, see Response 0001-97.

27. The requirements set by the California Code of Regulations (Title 14, Section 17783.15) will be met through the SCAQMD air quality permitting process. As discussed in the draft EIS/EIR (Appendix E, pp. 102-103), the proposed project must comply with SCAQMD Rule 1150.1 and with Regulation XIII. District Rule 1150.1 requires that the proposed project (a) install and operate a landfill gas collection system, (b) limit the average concentration of organic compounds (such as methane) at the surface of the landfill to 50 ppm, (c) install and operate an ambient monitoring system on the boundary of the landfill to determine whether or not there is off-site migration of LFG, and (d) submit a plan to the SCAQMD listing mitigation measures to be implemented if excessive gas concentrations are measured at the boundary of the landfill. SCAQMD Regulation XIII requires that the proposed project, including the landfill gas collection system, install and operate best available control technology. Air quality permits issued under SCAQMD Regulation XIII will specify operating and emission limits for the landfill gas collection system. The draft EIS/EIR included a description of the LFG control system and schematic representations of the relationship between the collection system and other structural components of the landfill. A more detailed description of the landfill gas collection system will be approved by the SCAQMD as part of their permit process.

28. Mitigation measures to control ravens can be found in Appendix E, pp. 83-84, of the draft EIS/EIR. See Response 0095-2b. The use of monofilament line to control seagulls is not deemed necessary because seagulls are not expected at the site. See Response 0017-2. If soil cover alone does not control insects and rodents, a professional pest control company will be hired. The operation of transport vehicles by MRFs must meet the terms and conditions of Title 14, California Code of Regulations Sections 17312, 17331, 17341, and 17533. Appendix K of the draft EIS/EIR contains the Mitigation and Monitoring Implementation Schedule (MMIS), including measures to control vectors. The updated Mitigation Reporting/Monitoring Program is provided in Section II.C. of the final EIS/EIR.

29. The screening of refuse for hazardous materials will occur before it reaches the landfill. For a description of this process, please see Response 0111-43. Hazardous wastes derived at the landfill or recovered during random inspections would be removed from the site to a licensed hazardous waste facility by a licensed hazardous waste carrier under manifest as required by law. The specific carrier(s) or potential disposal sites for such materials are not known at this time beyond referring to a list of current operators and permitted sites in California.

30. See Responses 0026-4, 0149-11, and 0157-51 above. Pages 142-143 of the draft EIS/EIR discuss the potential for hazardous wastes in the solid waste stream. The California Integrated Waste Management Board estimated that household hazardous waste comprises less than 0.5 percent of MSW in landfills (1988). Screening by the sanitation districts, however, indicates values of less than 0.05 percent of household hazardous waste in their landfills (1989). All of these reports conclude that the level of hazardous waste in the MSW going to landfills is very small and that these small amounts are effectively contained by the much larger mass of nonhazardous solid waste. More accurate figures of quantities of household hazardous wastes present in the wastestream being diverted from landfills in southern California will not be available until the effects of AB 939 are available.

31. See Response 0111-43 and 0002-8 for a discussion of the load-checking program.

32. The upper surface of the final cover will be designed to prevent erosion (page 73 of draft EIS/EIR). Also, see Response 0001-20 above. The drainage plan will be designed to prevent erosion. The drainage report is contained in Appendix L of the final EIS/EIR.

33. A drainage report is included in Appendix L of the final EIS/EIR. This report provides a hydrology analysis of the site including premining, postmining, interim, and ultimate hydrologic conditions. Preliminary drainage analysis of the site is also included which locates and sizes major drainage facilities.

34. See Response 0001-4 above.

35. See Responses 0159-32, 33, and 34 above.

36. Mitigation measures are incorporated into the project design which would reduce the potential for noise impacts. These measures can be found on pages 556 and 557 of the draft EIS/EIR. The noise technical report is provided in Volume II, Appendix H, of the draft EIS/EIR. Measures to protect workers from excessive noise levels include equipping all on-site equipment with mufflers, enclosing cabs on certain pieces of equipment, and providing earplugs to equipment operators and other staff potentially exposed to high noise levels. Worker safety will be regulated by General Industry Safety Orders of CAL OSHA (Title 8, Subchapter 7).

37. See Response 0102-84.

38. See Response 0026-3. In addition, as part of their own emergency response planning, MRC would maintain adequate staff on-site or on call to provide clean-up workers to supplement Southern Pacific workers and to accomplish trash pickup as necessary. This

provision, in conjunction with existing response plans, would provide adequate mitigation for the potential increase in accidents.

39. See Response 0026-3 and Table 10 of the draft EIS/EIR.

40. No significant truck or train traffic (accidents) impact is identified by the draft EIS/EIR. Appendix K of the draft EIS/EIR contains the MMIS. The updated Mitigation Reporting/Monitoring Program is provided in Section II.C. of the final EIS/EIR.

41. See Response 0021-25 above and pages 13-16 of Appendix B of the draft EIS/EIR.

42. See Responses 0026-41 and 0026-45.

43. All refuse transported by rail will be placed in an intermodal transport container (40 × 8 × 8 feet in size) which would be closed to avoid spillage and odor impacts. The rear closure of the container is a tightly fitting latched door that will prevent the escape of refuse. The closing mechanism on each container will be sealed to prevent unauthorized opening and to ensure that the latching mechanism is firmly engaged. See Responses 0026-41 and 0026-45.

44. The estimated water consumption associated with the landfill operations is 1,972 acre-feet per year (page 328 of the draft EIS/EIR). Based on an operating schedule of 312 days per year, this equates to 6.32 acre-feet per day.

45. The estimated figure of 1,972 acre-feet per year of water presented on page 328 of the draft EIS/EIR represents the usage for the project over the entire life of the project. No increases above this quantity are anticipated.

46. The container maintenance facility drainage system is designed to be self-contained so that all of the wash water will be properly treated and reused for additional washing and dust abatement (draft EIS/EIR, page 41). Other water conservation measures include the paving or treatment of unpaved road surfaces to reduce the quantity of water needed to reduce dust emissions. Leachate recovered from the landfill will be treated and used for dust control where feasible (page 65 of draft EIS/EIR). The natural surface drainage will be temporarily impounded prior to release. This water may also be recovered for use (see the drainage report, Appendix L, of the final EIS/EIR).

    An alternative method of handling leachate/condensate will be to collect and store it for off-site treatment and disposal. All appropriate regulations for the handling of hazardous materials will be observed.

47. The commenter is correct. The responsibility for implementing diversion and recycling programs in order to fulfill the requirements of AB 939 lies with appropriate local jurisdictions. The recycling process will be implemented via source separation (i.e., curbside recycling) or at the transfer stations and MRFs prior to refuse being transferred to the landfill, depending on specific programs implemented by each local solid waste agency. Recycling would not be a part of the landfill operations.

48. See Responses 0159-1 and 47 above.

49. As explained in the report (pages xx, xxi, and 13), no specific transfer stations or MRFs are part of this project or covered by this EIS/EIR. Also explained in the report (page 150) was the use of a hypothetical system of transfer stations for the purpose of analyzing transportation-related, indirect effects of the project. The MRFs for which this comment requests information do not exist. A general description of the operation of a typical transfer station or MRF is provided in the draft EIS/EIR (pages 48-49). See Response 0015-2 above.

50. See Response 0159-49 above.

51. See Response 0159-49 above.

52. Environmental documentation for each transfer station or MRF should include this information, to the satisfaction of the local agency with responsibility. This comment does not relate to the present document, however.

53. See Response 0159-52 above.

54. Operational standards as identified by state regulations must be addressed in various subsequent permits necessary for developing and operating the proposed landfill. These permits are noted on pages xx, xxi, and 12 of the draft EIS/EIR. Any substantial change in the project would require subsequent environmental review, at which conformance with these standards, as well as other environmental issues, may be addressed.

55. Pages 73-74 of the draft EIS/EIR specify some of the basic conditions necessary for a closure plan for the landfill. These include certifying the availability of funds for monitoring and maintenance for 30 years after the closure of the landfill.

As part of the post-closure maintenance program, observations will be performed for the final cover, vegetative cover, drainage system, final grading, and environmental control systems. The need for post-closure maintenance will be monitored through a quarterly site review program planned as an extension of the existing self-monitoring program. MRC will be responsible for all aspects of post-closure monitoring and controls.

56. See Response 0159-55 above.

57. A replacement Mitigation Reporting/Monitoring Program has been prepared and is included as Section II.C. of the final EIS/EIR.

58. This comment is apparently intended as a summary of issues raised earlier in the same letter. As such, responses are provided above at Responses 159-10 through 21. Mitigation measures associated with the protection of water quality are incorporated in the MMIS (see Section II.C. of the final EIS/EIR).

59. Waste will be brought to the landfill in closed containers. The waste will have been inspected for hazardous materials and sorted for recyclables at a MRF located off-site. The incentive and potential for illegal dumping will occur prior to the waste arriving at a MRF, not at the Eagle Mountain landfill. The Eagle Mountain landfill will not be open to the general public. Unauthorized access will be controlled by fencing or signage along the perimeter of the site. All access roads will be equipped with lockable gates. Unauthorized entry will also be discouraged by the topography of the steep hillside slopes on the northern and southern perimeters and by the elevation differential between the base and the crest of the hills on the east perimeter. Signs will be posted at the scale house check station that will list unacceptable types of wastes and include a warning about the random load-checks.

60. During the post-closure period, the site is to be used for nonirrigated open space. Irrigation will be used only during the vegetation establishment period. Any changes to this use must be approved by the responsible agencies and be in compliance with Title 14 CCR 17796.

61. See Response Number 159-1, above.

62. See response Number 159-4, above.

63. See Response 0159-5.

64. See Response 0159-6.

65. This comment is apparently intended as a summary of issues raised earlier in the same letter. As such, responses are provided above at Responses 159-19 and 20.

66. See Responses 0002-5 above.

67. Surface runoff will be directed away from active landfill areas. Rain falling on the landfill sites will be routed to detention facilities, treated, and tested prior to release. No runoff

from active landfill sites will be allowed to flow into the East Pit or to mix with other natural flows. Additional description regarding this separation is provided in the drainage plan (see Appendix L of the final EIS/EIR).

68. See Responses 0001-111 through 116, 0002-13, and 0159-17 above.

69. See Responses 0001-10, 11, and 12 above.

70. See Responses 0001-111 through 116, 0002-13, and 0159-17. The East Pit is currently used as a drainage sump for runoff in Eagle Creek, as indicated on page 192 in the draft EIS/EIR. The East Pit will continue to be used in this manner until the development of this area for fill operations occurs, as stated on page 442 in the draft EIS/EIR. Only uncontaminated storm water runoff will be allowed into the East Pit.

71. Operation of the landfill and associated equipment will be in accordance with the terms and conditions of Title 14, California Code of Regulations. In particular, those sections which require actions to prevent the harboring of flies, birds, and vectors will be observed. Methods by which these provisions will be observed include the closure of waste in containers during transportation; the use of daily, intermediate, and final cover; and active control measures (pages 51, 57, and 345 of the draft EIS/EIR).

72. This comment is apparently intended as a summary of issues raised earlier in the same letter. As such, responses are provided above at Responses 0159-32, 33, and 34.

73. This comment is apparently intended as a summary of issues raised earlier in the same letter. As such, a response is provided above at Responses 0159-36 above.

74. See Responses 0159-37, 38, and 39 above.

75. For the accident record of Southern Pacific, see Response 0102-84. The truck transport will be contracted by the MRFs and, as such, are unknown at this time.

76. Several types of rail cars might be used on the project. All are of a type currently in use by the rail companies for the transport of containers. Loaded containers, under normal operations, would not remain idle for more than a few hours, depending upon operating schedule. Loaded containers will stand at the MRF or container marshalling yard during the loading or unloading of a unit train. This total time is not expected to exceed five to six hours. Loaded trains may await switching at Ferrum Junction for two to six hours, possibly up to a day.

77. See Response 0159-28 above.

78. See Response 0159-44 above.

79. The project does not propose to actively participate in planned programs or activities to assess waste diversion programs. Rather, the Eagle Mountain landfill will not accept refuse that does not comply with the goals of AB 939. See Response 0027-28.

80. See Response 0159-1 above.

81. The updated Mitigation Reporting/Monitoring Program is contained in Section II.C. of the final EIS/EIR.

82. See Responses 0159-6, 7, and 8 above.

83. See Response 0073-1 above.

84. See Response 0002-4 above.

85. The operations phasing plan shows that the west end of the East Pit will be utilized for disposal of refuse during years 7-30 of the project. The east end of the East Pit will not be used for the disposal of refuse until about year 85 of the project (see Figures 18, 19, and 20 of the draft EIS/EIR).

86. See Responses 0002-4 and 5 above.

87. See Responses 0002-4 and 5 above.

88. The drainage report will provide a concept for ultimate drainage flow after completion of the landfill. See Response 0159-33 above.

89. As discussed in Response 0159-27 above, SCAQMD Rule 1150.1 requires that the proposed project install an ambient monitoring system at the boundary of the landfill. As discussed in the draft EIS/EIR (Appendix E, pp. 81-84), landfill gas will be collected and piped to a combustion system for incineration. The combustion process will destroy the trace quantities of toxic elements contained in the gas.

    As stipulated by Assembly Bill 2588 (the "Air Toxics Hot Spots Program"), the proposed project will be required to conduct an air toxic emissions inventory. This inventory will require the testing of the landfill gas generated at the facility to identify and quantify the amount of toxic constituents in the gas. If the toxic emissions inventory results in the project being classified as a "high priority facility" for the purposes of risk screening, AB 2588 requires that the project then conduct a detailed risk assessment. Therefore, the proposed project includes a program for the control and monitoring of hazardous air pollutants, as required by existing air quality regulations.

90. See Responses 0002-4 and 5 and 0159-27 above.

91. This comment is apparently intended as a summary of issues raised earlier in the same letter. As such, a response is provided above at Response 159-28 above.

92. See Responses 0026-3 and 19, 0118-14, and 0109-1.

93. Because the refuse will be loaded in containers, there will not be a need to clean the railcars. The maintenance schedule for the railcars will be established by the owner or lessor, but normally, general inspections are conducted weekly with major overhauls being performed every 300,000 miles.

94. The technical data necessary to permit full assessment of significant environmental impacts is located in the technical appendixes of the draft EIS/EIR. The responses to public comment letters attempt to direct the reader to information in the draft EIS/EIR or the final EIS/EIR which contains an errata section, a list of minor project changes, and supplementary information requested by various public commenters. Otherwise, the responses attempt to explain why the requested information is not available or not required for approval by the lead agencies for the proposed project.

95. The above responses to this comment letter attempt to direct the commenter to the requested information in the draft EIS/EIR or the final EIS/EIR. As such, the requested subsequent review period is not deemed necessary.

96. The final EIS/EIR will be available 30 days for review prior to the final approval by the BLM and is noticed in the Federal Register.

DOCUMENT 0160 Letter from City of La Quinta, September 13, 1991

1. See Response 0021-27.

2. See Response 0026-64.

3. The Proposed Action with Rail Access Only alternative would eliminate the trucking component of the project entirely. This alternative is described on page 75 of the draft EIS/EIR. The impacts associated with this alternative are described for each issue in the Environmental Consequences section starting on page 317. It should be noted that since the preparation of the draft EIS/EIR, the proposed project has been modified to reduce truck traffic to the project site from 200 to 100 round trips daily and in three years to

eliminate all but those trucks serving the desert cities (not to exceed 100). Details of the modified project are contained in Section II.B.2 of the final EIS/EIR.

4. The mitigation measures for PM10 emissions are discussed in the draft EIS/EIR (see Appendix E, pp. 105-131). See Response 0117-4 for a comparison between the mitigation measures recommended under the Coachella Valley PM10 Plan and the measures included in the draft EIS/EIR. Table FEIR-AQ-2 contained in Appendix M, Attachment 2 of the final EIS/EIR shows a comparison between the mitigation measures recommended in the Coachella Valley PM10 Plan and those included in the draft EIS/EIR. The table also includes comments explaining why some mitigation measures are not deemed applicable to or not feasible for the Eagle Mountain project.

5. The operators of the MRFs will be responsible for enacting the requirements of AB 939.

6. A portion of the revenues received would be allocated to supervisorial districts within the county of Riverside. The expenditure of these host community fees will be dictated by the County of Riverside as deemed appropriate by the County. See the Socioeconomic section (IV.H.2) of the draft EIS/EIR for details of the memorandum of understanding between MRC and the County of Riverside.

7. See Responses 0001-25 and 0002-4 for the proposed measures to protect groundwater quality. A detailed description of the proposed groundwater monitoring system is described in the draft EIS/EIR (pages 46, 59-60, 73, 104, 121, 124, 127, 132, and 322-323). All groundwater monitoring of wells will be conducted quarterly and throughout the life of the landfill. Water samples will be tested for levels of constituents as set by the RWQCB. Water level measurements and water quality analysis will be reported on a quarterly basis as set by CCR Title 23, Chapter 15, Article 5, Sections 2555 and 2559. Since the results of the monitoring will be public information, it will be available to the City and Coachella Valley Association of Governments if desired. Also, see Response 0002-5.

8. Operators and haulers are required to carry liability insurance against accidents. MRC will fund additional adequate insurance for the cleanup and environmental response to potential accidental spills. Also, see Response 0109-1.

9. It is unclear what is meant by "alternate forms of transportation." The draft EIS/EIR discusses mitigation measures associated with truck and rail transport in Appendix E, pp. 105-121. Due to the lack of suitable waterways in the vicinity of the proposed landfill, waste transport by ship or barge would be infeasible. Due to cost and safety concerns, waste transport by air would also be infeasible. If the comment is referring to the electrification of landfill equipment or the railway, please refer to Response 0003-44.

DOCUMENT 0161 Letter from City of Palm Desert, September 23, 1991

1. Pages 73-74 of the draft EIS/EIR specify some of the basic conditions necessary for a closure plan for the landfill. These include certifying the availability of funds for monitoring and maintenance for 30 years after the closure of the landfill. MRC will be responsible for all aspects of post-closure monitoring and controls. The closure and post-closure costs will be formatted according to Title 14 of the California Code of Regulations and will include a letter of credit which is a demonstration of financial responsibility for closure and post-closure costs and a financial means test and guarantee demonstrating responsibility for closure of the site.

2. See Response 109-1.

3. Please refer to Response 0033-8. Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of diesel engines with selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from Eagle Mountain railway locomotives. The revised Mitigation Measure AQ-9 includes a specific timetable for conducting the feasibility study. A comparison of the emissions from the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M). MRC has no control over the Southern Pacific main line electrification.

4. Project compliance with the SCAQMD New Source Review requirements is discussed in the draft EIS/EIR (see Appendix E, pp. 102-105). The need for emissions offsets is discussed in this section as well. Discussions with SCAQMD Engineering Division staff indicate that emission offsets will be required for emissions from stationary equipment and from mobile equipment associated with the stationary sources. District regulations do not require offsets as suggested by the commenter. These offsets are emission reductions calculated in accordance with precise regulatory procedures, and neither CEQA nor NEPA require the provision of offsets. Rather, CEQA and NEPA require (a) an accurate assessment of the air quality impacts associated with a proposed project, (b) a determination as to whether or not the project impacts are significant, and (c) the use of all practical mitigation measures in order to reduce significant impacts. The draft EIS/EIR complies with these requirements.

5. Please refer to 0015-2.

6. As stated on pages 31, 39, and 46 of the draft EIS/EIR, during Phase I operations, one train per day would enter the landfill site. This train would use the existing Eagle Mountain rail line to reach the Phase I container handling yard. When the amount of refuse exceeds one train per day, train transport would be shifted to the Phase II container

handling yard. This area of the landfill would be accessed by the new rail spur. A maximum of six trains per day would be permitted during Phase II operations.

7. Each container of waste shipped to the Eagle Mountain landfill will be identified by source (MRF or transfer station) and weight. This same mechanism will be used to ensure that the 20,000 tpd of waste limit is not exceeded. It is important to note that 20,000 tpd of waste is not expected for approximately 10 years, allowing adequate time to develop an efficient and effective mechanism of identifying the source and weight of incoming waste. The Local Enforcement Agency (Riverside County Department of Health) will be responsible for ensuring that the maximum allowable volume per day is not exceeded.

8. The intrinsic moisture content of the refuse is characterized by the draft EIS/EIR on pages 58-59 and 318. Precluding liquid refuse from the waste stream reduces moisture content and consequently the potential for leachate. Little or no leachate is expected in this landfill, thereby reducing the potential for groundwater pollution to a level below significant.

9. The landfill gas collection system is described on pages 70-72 and Section IV.B.2 of the draft EIS/EIR. Methane gas would not be stored. Instead, LFG will be collected in a series pipes through the use of a vacuum pump and incinerated in a thermal combustion unit.

10. Effects on the air quality in the Coachella Valley are discussed in Response 0003-33.

11. We presume that the "gas leaks" referred to in this comment mean LFG migration into structures on or near the landfill. Structures in the town of Eagle Mountain would not be affected by LFG migration due to their distance from the refuse mass and implementation of the mitigation measures discussed on pages 336-338 of the draft EIS/EIR. Specific monitoring well design specifications would be subject to approval of the Riverside County Department of Health as part of the solid waste facilities permit. An adequate method for identifying the presence of LFG to inhabitants of monitored structures will be necessary to make the mitigations work.

12. Although the proposed project is planned to have a life in excess of 100 years, standard design practice and most regulatory agencies only require drainage designs based on a 100-year storm. It should be noted that the drainage facilities at Eagle Mountain will be sized to accommodate 100-year storm flows for the most critical events ranging from 1-, 3-, 6-, and 24-hour duration storms. In addition, a 500-year frequency standard will be adopted for review of channel freeboard design. For given areas, the intensity, duration, and frequency of rainfall has been long charted and analyzed in accordance with approved statistical methods. The recurrence interval of any storm event is the reciprocal of its annual probability. A 100-year storm event is a level of expected rainfall intensity which

has a chance to be reached or exceeded on the average of once in 100 years. In any one year, the probability of exceeding this level of precipitation is one percent. Mathematically, a 200- or 300-year storm event generates only very slightly more rainfall than a 100-year storm event.

13. The thickness of the daily cover would be a minimum of six inches. The draft EIS/EIR states that the final cover will be designed in accordance with Title 23, CCR, Chapter 15. The final cover, having a minimum thickness of four feet, would consist of a two-foot foundation layer, a one-foot barrier layer, and a one-foot vegetative layer (draft EIS/EIR, page 73). The design of the daily and final cover would meet the performance goals as outlined in Title 23, CCR, Chapter 14. As such, the standards are considered adequate.

14. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program for the removal of recyclables and hazardous materials. See Response 0111-43 for a description of this process. If refuse does not comply, it will not be taken to Eagle Mountain. If rail-based MRFs are not approved, it is anticipated that approved refuse will still be brought to the landfill by truck. Load-checking of incoming refuse would occur at the transfer station and MRFs to remove hazardous materials. Each transfer station and MRF would initiate their own load-checking program as required under the facility permit and is not part of the proposed project. However, as part of the proposed project, MRC would institute a periodic inspection program to monitor the continued compliance and effectiveness of the load-checking programs. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the Local Enforcement Agency (Riverside County Department of Health).

15. See Response 0001-25.

16. Both the local and regional growth-inducing impacts of the project are addressed in Section IV.H. of the draft EIS/EIR.

17. The project includes a General Plan Amendment to replace current land use designations of Mineral Resources, Desert areas, Mountainous areas, and Areas Not Designated as Open Space with an SP designation supported by the SP exhibits and text. A rezone will be required also. These measures are discussed on pages 31-33 and 437-438 of the draft EIS/EIR and bring the proposal into compliance with the Riverside County General Plan.

18. A detailed discussion of project impacts to Nelson's bighorn sheep can be found in both the draft EIS/EIR (pp. 452-457) and Appendix F (pp. 52-54, 71-72, 79, 81, and 84-85).

19. Daily trash burial and fencing of the active portion of the landfill should reduce the likelihood of significant increases in coyotes. Any increases are likely to be localized around the immediate vicinity of the landfill. See Response 0147-17. The creation of new bighorn sheep water sources away from the landfill should decrease the chances for coyote impacts to sheep.

20. The project does create habitat through the creation of additional water sources. Habitat is not just vegetation but all elements necessary to a species' survival. Without the new water sources, the sheep are excluded from using large areas of otherwise suitable areas in the Eagle Mountains on a year-round basis.

21. The draft EIS/EIR (pages 449-451) recommends mitigation measures to reduce impacts to sensitive species; for example, barrier-culvert systems to prevent loss of desert tortoises to truck and train traffic, a raven control program, and creation of new water sources for bighorn sheep. The draft EIS/EIR also proposes to compensate for the loss of tortoise habitat through purchase and preservation of habitat off-site. See Section II.C. of the final EIS/EIR for a list of these mitigation measures. The monitoring programs are recommended to assess what level of mitigation is necessary for each species and implement the mitigation program that is most effective, both in terms of species protection and implementation. It is not understood what is meant by "what if" occurrences.

22. It is believed that sufficient information is presented to assess the significance of impacts. In certain instances, monitoring will be necessary to estimate impacts and implement the appropriate mitigation measures.

23. No scientific studies have been conducted on the effectiveness of a culvert system in avoiding desert tortoise train-kills. Tortoises are known to use culverts. Several options are being considered for eliminating train-kills. One is a barrier system and the other is monitoring the rail line before each train trip and removing any tortoises on the tracks. The exact mitigation program is outlined in the Biological Assessment prepared for the Section 7 consultation as required by the Endangered Species Act (see Appendix N of the final EIS/EIR).

24. The project will be conditioned to have all waste handled through a MRF or transfer station prior to being hauled by truck or rail to the landfill.

25. It is true that only a small percentage of waste is handled through MRFs in the southern California area and that the project does not include developing any MRFs. However, it is felt that by the time the Eagle Mountain landfill is operating, an adequate number of MRFs will have been completed to meet the requirements of AB 939 and the condition required of the proposed project (see Response 0161-24 above) will be able to be met.

If MRFs are not developed prior to the operation of the proposed project, operation of the landfill cannot occur.

26. The proposed project does not include any composting. All trash sent to Eagle Mountain must have been processed by a MRF which includes the removal of green waste.

27. Section II.B.2 of the final EIS/EIR contains a discussion of how the truck portion of the proposed action has been modified. After three years, no trucks will be allowed to haul trash from outside the desert communities. Trucks would be allowed to haul trash from the Coachella Valley.

28. See Responses 0003-30, 31, 32, 33, and 34.

29. This comment does not address the adequacy or accuracy of the draft EIS/EIR. No response is necessary.

30. The development agreement approved by the Riverside County Board of Supervisors will identify where revenues from the tipping fee agreement are to be spent.

31. The project will be conditioned to accept all mitigation measures set by the SCAQMD. See Response 0003-44 for a discussion of electrification of the Eagle Mountain rail line.

32. See Response 0161-30 above.

DOCUMENT 0162 Letter from Southern California Edison Company, October 8, 1991

1. This comment does not address the adequacy or accuracy of the draft EIS/EIR. No response is necessary.

DOCUMENT 0163 Letter from City of Ontario, September 23, 1991

1. The proposed action is expected to be capable of accepting up to six unit trains per day at the container handling yard. To transport the amounts of solid waste from the geographic areas assumed for the analysis, an average of 4.7 shipments per day will be required when the project is operating at full capacity. Based on this description and counting return trips for the trains, an average of 9.4 trains per day will utilize the primary rail segment (with a maximum number of 12 trains per day on a round-trip basis), with fewer trains on each of the secondary segments. Proponents of the proposed action will arrange scheduling of refuse unit trains with Southern Pacific on a contractual basis to prevent any conflict between ongoing rail operations and trains being utilized for the landfill project. In summary, the project-related usage of rail transport is expected to

have a minimal effect on the rail lines and surrounding infrastructure. The draft EIS/EIR (pages 357 and 361) concludes that no significant impacts have been identified for rail operations or at-grade crossings, and thus, no mitigation is necessary.

2. Subsequent to preparation of the draft EIS/EIR, MRC has proposed to limit truck traffic to 100 loads of waste per day. This is a reduction by one-half in the proposed action of the draft EIS/EIR. See Section II.B.2 of the final EIS/EIR for a discussion of this project modification. After three years, this truck traffic would be limited to originating from the desert cities only. In other words, no truck traffic would originate from Ontario after three years of the commencement of the project. At this time, it is not possible to speculate about the truck traffic through Ontario. It is important to note that the maximum tonnage per day is not likely to be reached for 10 years.

3. If any MRF is proposed for the city of Ontario, it would require environmental documentation and permit approval by the City prior to its operation.

DOCUMENT 0164 Letter from The Desert Protective Council, Inc., September 22, 1991

1a. Mitigation measures are fully discussed in the draft EIS/EIR (see Appendix E, pp. 105-131), so it is not clear which alternatives the commenter is referring to. In general, alternative fuels do not result in inherently lower emission levels. For on-highway vehicles, California's low-emission vehicle regulations and the corresponding requirements of SCAQMD Rule 1601 achieve the objectives of what are popularly referred to as "alternative fuels." While alternative fuels may be used to comply with these regulations, they are not essential, nor do they provide any air quality benefits as compared with "traditional" fuels used to satisfy the same regulations. The California and the SCAQMD low-emission vehicle programs are discussed in the draft EIS/EIR (Appendix E, pp. 107-108).

For locomotives and landfill equipment, alternative fuels may provide air quality benefits. Appendix E of the draft EIS/EIR discusses the use of alternative fuels (such as methanol, natural gas, or liquefied petroleum gas) as well as electricity for locomotives (pp. 115-117) and for landfill equipment (pp. 120-121). Mitigation Measure AQ-16 states that wherever available, electric versions of landfill equipment including overhead cranes, crushers, conveyors, and pugmills will be used. Where not available, alternative-fuel technology will be used depending on air permitting standards.

In addition, as discussed in Response 0164-1a, Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from the Eagle Mountain railway locomotives. See the Mitigation Reporting/Monitoring Program in Section II.C. (Air Quality) for more details of the mitigation measure. Electrification of this equipment would reduce the emissions associated with landfill equipment by approximately five percent. The actual emissions reductions associated with these measures are shown in Table FEIR-AQ-4, included in Appendix M (Attachment 2) of the final EIS/EIR.

No qualification of air quality benefits from the use of alternative fuels in landfill equipment is possible at the present time, because no alternative-fueled engines are available for the types of equipment expected to be used in the Eagle Mountain project.

1b. SCAQMD rules require that a landfill gas disposal system be installed. Rule 1150.1 (c)(7) requires that the landfill gas collected by the control system be disposed of by any of the following methods, which have been demonstrated to the satisfaction of the district's executive officer to achieve maximum possible efficiency: (a) combustion, (b) gas treatment and subsequent sale, (c) sale and processing off-site, and (d) other equivalent methods.

In the initial stages of the landfill, there is really no alternative to flaring as a method of disposal. It is not possible to utilize landfill gas generated during the early years of the landfill for cogeneration because, during those early years, the LFG would not contain enough methane to sustain combustion. That is, the energy content of the gas is not high enough to make treatment, energy recovery, and sale of energy physically and economically feasible. As required by the regulations, whatever gaseous compound is generated has to be collected, augmented with natural gas or propane, and then flared. The transition point where a landfill can change from flaring to energy recovery is not determined solely by the energy content of the LFG produced. After a certain period of time, there would be enough methane in the LFG to sustain combustion, but by that time, substantial amounts of money will have been invested in the installation and upkeep of the flare system. An additional complication is presented by the future need for add-on NOx controls for the LFG combustion system. NOx control devices have not been specifically developed for LFG flares yet. Thus, the question may not be how much LFG is needed to justify the capital cost to develop a new system of cogeneration, but how much LFG will generate enough NOx emissions that would require add-on NOx controls.

Incidentally, it must be noted that these LFG "flares" are not flares in the sense that one sees natural gas being "flared" at oil fields. The LFG flare is a combustion chimney in which the actual combustion occurs inside the chamber. There is no open flame or soot producing visible pollution plumes.

2. The comment is unclear. Appendix E of the draft EIS/EIR includes a thorough discussion of *all* potential mitigation measures and their feasibility on pages 105-131. Appendix E

(pp. 147-210) also includes an analysis of project alternatives and of the emissions that would result if each alternative were implemented with and without mitigation.

3. The comment is incorrect. The air emissions estimates for the Eagle Mountain and the Southern Pacific railroads included in the draft EIS/EIR were calculated using emission factors for General Electric and Electromotive Division diesel locomotives. These two companies build most of the diesel locomotives in use in the United States today.

4. Suggested mitigation measures for the Eagle Mountain railway are discussed in the draft EIS/EIR (see Appendix E, pp. 125-126). The measures include the use of on-highway motor vehicle diesel fuel and the use of low NOx diesel engines. In addition, as discussed in Response 0164-1a, Mitigation Measure AQ-9 has been revised in the final EIS/EIR to include a feasibility study to evaluate the potential for use of selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from the Eagle Mountain railway locomotives.

   Electrification of the Southern Pacific main line was not evaluated as a mitigation measure because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. While at the present time both the California Air Resources Board and the South Coast AQMD are exploring ways to reduce locomotive emissions, including options for electrification of the Southern Pacific main line, the effects of such potential regulations are at this time considered remote and speculative.

5. The context of the draft EIS/EIR is being misread. Page 385 does not "discard" (that is, eliminate from further consideration) the use of alternative fuel-burning locomotive engines. The text merely explains that using such fuels is infeasible at the present time because no locomotive engines using said fuels are, as of 1991, commercially available. This does not contradict the discussion of alternative fuels in Appendix E (pp. 115-116), which, in fact, concludes that "no locomotive engines using these fuels are presently available." Nowhere in the draft EIS/EIR, neither in the main body of the document nor in the technical study, is it said or implied that there are now commercially available locomotive engines using alternative fuels but that their use is being "discarded" or rejected by the Eagle Mountain project. Alternative fuels for the rail line will be constantly evaluated as new technology is developed. This commitment to evaluate the feasibility of using alternative fuels for the Eagle Mountain rail line is reflected in the revision to Mitigation Measure AQ-9 in the final EIS/EIR to include a feasibility study of the potential use of selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from the Eagle Mountain railway locomotives.

6. Again, the context of the draft EIS/EIR is being misread. Appendix E (pp. 115-116) explains that there is a large number of high-powered, medium- speed, lean-burn engines

using natural gas and other alternative fuels which are presently in use in *stationary* applications (such as emergency electric generators or compressor engines). The text explicitly states that "no *locomotive* [emphasis added] engines using these [alternative] fuels are presently available." A discussion of two possible approaches to develop spark-ignition natural gas engines for use in locomotives is included. There is more to making this alternative-fuels technology work than just engine replacement, even though there may be good candidate engines for said replacement. Fuel storage and transfer must also be considered. Thus, the analysis concludes that the use of alternative fuels in locomotive engines must be evaluated further. As discussed in Response 0164-1a, 4, and 5, MRC will be required to evaluate the feasibility of using alternative fuels for the Eagle Mountain rail line. This commitment is reflected in the revision to Mitigation Measure AQ-9 in the final EIS/EIR to include a feasibility study of the potential use of selective catalytic reduction (SCR) or natural gas fuels to reduce emissions from the Eagle Mountain railway locomotives.

7. A comparison of the emission factors and emission rates for the uncontrolled diesel-fired, mitigated diesel-fired, and natural gas-fired Eagle Mountain railway locomotives is shown on Table FEIR-AQ-15 of the final EIS/EIR (Attachment 2 of Appendix M).

   Railway electrification is discussed in Appendix E (pp. 116-117). Future electrification of the 52-mile stretch of track between Ferrum Junction and the landfill site was discussed in the draft EIS/EIR as potentially feasible. Mitigation Measure AQ-10 requires the preparation of a feasibility analysis of electrification at such time as there is sufficient landfill gas. Electrification of the Eagle Mountain rail line is not considered feasible at this time because of the steep grades and several major turns in the rail line (page 386 of the draft EIS/EIR). Also, the costs and physical disturbance necessary for the installation of the catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures. The electrification of the Eagle Mountain railway will be evaluated when sufficient landfill gas is generated to provide the required electrical energy. Table FEIR-AQ-5 Appendix M, Attachment 2 of the final EIS/EIR) shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

   Electrification of the Southern Pacific main line was not evaluated as a mitigation measure because neither the project applicant nor the lead agencies nor any responsible agency would have the authority to implement or require such a mitigation measure for this project. While at the present time both the California Air Resources Board and the South Coast AQMD are exploring ways to reduce locomotive emissions, including options for electrification of the Southern Pacific main line, the effects of such potential regulations are at this time considered remote and speculative.

8. The fuel consumption rate for rail transport shown on Table 51 (page 575) of the draft EIS/EIR is incorrect. The correct diesel fuel consumption associated with rail transport is 21,404 gallons per day rather than 10,425 gallons per day, as noted in Section VI of the final EIS/EIR.

9. See Response 0001-90 for a comparison of air emissions from truck versus rail transport on a ton-per-mile basis. The draft EIS/EIR includes an accounting of truck and train emissions, as appropriate, for each alternative considered. For easier understanding, Figure FEIR-AQ-1 in Appendix M, Attachment 2 of the final EIS/EIR, shows a simple comparison of truck and train emissions per ton-mile of material moved. The data indicate that modern, clean, on-highway trucks have generally lower emissions than uncontrolled locomotives. However, locomotives which use the mitigation measures recommended for the Eagle Mountain project result in generally lower emissions per ton-mile than on-highway trucks.

10. This comment does not address the adequacy or accuracy of the draft EIS/EIR and, therefore, no response is necessary.

11. The table cited by the commenter (Appendix E, page 94) compares the relative ambient concentration impacts from landfill equipment and the landfill gas flares. Several modeling runs were conducted to analyze the project's ambient impacts. A separate modeling run was conducted for each criteria pollutant (NOx, CO, ROG, PM10, and SO_2) using the EPA-approved SHORTZ dispersion model. Using this method, it was possible to determine the point of maximum off-site impact for each pollutant, as well as the emission sources contributing to this impact. For the maximum PM10 impact point, less than one percent of the ambient impact at this point was due to flare emissions. Therefore, the table on page 94 of Appendix E shows a relative PM10 contribution of zero percent for the flares.

12. The draft EIS/EIR discusses mitigation measures associated with the combustion of landfill gas (see Appendix E, pp. 122-123). It is unclear what the commenter means by "other" mitigation measures.

13. One of the suggested mitigation measures listed in the draft EIS/EIR (page 382) is for Mine Reclamation Corporation to conduct an analysis of the technical and economical feasibility of recovering energy from the landfill gas when the landfill gas generation rate exceeds five million cubic feet per day. According to projected worst-case landfill gas generation rates, a total landfill gas generation rate of five million cubic feet per day will be attained approximately 4.5 years after the landfill begins operations. At that time, Mine Reclamation Corporation will have a better understanding of the actual landfill gas generation rates and of the energy potential of the gas. This information is necessary for the feasibility analysis of a landfill gas energy recovery system. Neither CEQA nor

NEPA require the preparation of analyses which rely on data which is not available. The analyses contained in the draft EIS/EIR have been prepared based on the best data available.

14. The Eagle Mountain landfill project does not include plans for composting. If AB 939 is to be effective, much of the green waste contained in the trash stream will be removed for composting at the MRFs or the transfer stations. Thus, the green waste will not be considered a recyclable item for shipment and storage at Eagle Mountain.

15. The toxic air pollutant control efficiency of 99 percent used in the draft EIS/EIR is based on several source tests of landfill gas flares within the South Coast Air Basin. Table FEIR-AQ-13 in Appendix M (Attachment 2) of the final EIS/EIR summarizes the destruction efficiencies noted during these tests.

16. Table FEIR-AQ-13 summarizes the results of six source tests on landfill gas flares. As the commenter notes, the destruction efficiency can vary among different compounds. However, the test results demonstrate that an efficiency of 99.0 percent or greater can be achieved on all compounds tested. Because the Eagle Mountain project will use best available control technology, it is likely that the 99 percent destruction efficiency will be maintained on a long-term average basis. Furthermore, even if less than a 99 percent destruction efficiency is achieved, the conclusions regarding health risk associated with the proposed project would remain the same. This is because the analysis of risks is dependent on the estimated 20 percent of LFG which is assumed to escape through the surface and not on the 80 percent which is disposed of through flaring.

17. Page 41 of the draft EIS/EIR discusses the storage of recyclable material at the site. The transport and storage of recyclable materials at Eagle Mountain is intended to be a temporary condition while recyclable markets are depressed or in development. Although, theoretically, 10,000 tpd of recyclables could be generated from the daily 20,000 tpd trash destined for Eagle Mountain, a substantial amount of that material will be immediately shipped to manufacturers which use the recyclables as feed stock. Recyclables sent to Eagle Mountain for interim storage will not be the property of the Eagle Mountain project, but rather the property of recycling firms or MRFs. They will be transported to the site on one of the six trains per day serving the landfill. When the owner requires return of the recyclables, they will be shipped back in one of the empty railcars returning from the site.

18. See Response 0021-19.

19. The transport of recyclable materials for temporary storage at the site would utilize one of the six trains per day serving the landfill. When the owner requires return of the recyclables, they will be shipped back in one of the empty railcars returning from the

site. Recyclable materials will not be landfilled. The impacts resulting from transport of these recyclables to and from the site are included in the proposed action evaluated in the draft EIS/EIR. No additional impacts would result. Due to the cost involved for shipping and storage of recyclables at Eagle Mountain, recyclers will have to weigh the cost of this against local storage, expatriation, or immediate use.

20. See Response 0164-19 above. The County would not receive any royalty or mitigation fee for the storage of recyclable materials.

21. Since the preparation of the draft EIS/EIR, truck traffic to the project site has been reduced from 200 to 100 round trips daily and in three years to eliminate all but those trucks serving the desert cities (not to exceed 100) within three years. See Section II.B.2 of the final EIS/EIR for a description of the project modification. This discussion includes a summary of the air impacts due to adding 330 tons per day to 4.7 trains. This weight per train is the maximum worst-case analyzed and would not be exceeded by adding recycables to an otherwise less than full train. The emission factors for various criteria pollutants are discussed in greater detail in Attachment 10 of Appendix M of the final EIS/EIR.

    The transport of recyclable materials to the site for which there is no immediate market will occur on one of the six train transporting solid waste to the site. When conditions favor returning the recyclables to their owner, they will be placed on one of the six empty trains returning from the landfill. No additional trucks or trains will be used to transport these recyclable materials to and from the site and the maximum weight of 18,000 tons per day by train and 2,000 tons per day by truck will not be exceeded. The impacts resulting from transport of these recyclables to and from the site are included in the proposed action evaluated in the draft and final EIS/EIR as explained above. No additional impacts would result.

22. As discussed in the draft EIS/EIR (Appendix E, page 190), the landfill gas generation rate for the "No Project" alternative was assumed to be the same as the amount estimated for the Eagle Mountain project, although the higher moisture levels and rainfall rate in the South Coast Air Basin would be expected to result in more landfill gas being generated for each ton of waste buried in the South Coast Air Basin.

23. The estimated landfill gas generation rate for the "No Project" alternative represents only the additional landfill gas generated if the Eagle Mountain project does not become operational and does not include the landfill gas generated from waste already in place at existing landfills.

24. Acceptance by Riverside County of refuse from Los Angeles and other counties is contingent upon the approval of the project Development Agreement authorized by the

Riverside Board of Supervisors. The Solid Waste Management Plan states that ". . . it is illegal to dispose of solid wastes at Riverside County-operated Class III landfills which have been generated in other counties, without prior approval. . . . The ultimate decision to allow importation of any solid wastes whether in a private or public facility shall rest with the Board of Supervisors on a case-by-case analysis (page IV-5)."

Transport of waste from Los Angeles, Orange, San Bernardino and Riverside counties has been analyzed and could be accepted, subject to Riverside County approval. Transport of waste from other jurisdictions would require additional environmental review.

25. The relative impacts of the proposed project and of all the alternatives, including the "No Project" alternative, are discussed in the draft EIS/EIR separately for the South Coast Air Basin and for the Southeast Desert Air Basin. As discussed in Response 0117-3, the estimated impacts from the proposed project in the Coachella Valley will result in an increase above the estimated 1991 emissions baseline for the area. The emissions increases are of approximately 3.8 percent for NOx, approximately 0.5 percent for ROGs, and approximately 0.06 percent for PM10 emissions. There are no approved regional air quality models which can be used to perform the analysis requested. Regional photochemical models, such as those used to prepare regional air quality plans, are not suitable for this purpose, because they are insensitive to changes in emissions which are less than five percent of the regional total. The emissions changes associated with the Eagle Mountain project are below this sensitivity threshold in the South Coast and Southeast Desert air basins and in the Coachella Valley. The analysis in the draft EIS/EIR was performed using the best analytical tools available.

26. This comment is correct. Table 50 (page 573 of the draft EIS/EIR) shows under the 20,000 tpd column that (for 4,000 tpd by truck) 2,500 8-ton packer trucks, 160 25-ton transfer/trailer rigs, and 486 22-ton capacity transfer/ trailer rigs are needed. For the 16,000 tpd column (2,000 tpd by truck), 2,000 8-ton packer trucks, 80 25-ton transfer/trailer rigs, and 425 22-ton capacity transfer/trailer rigs are needed. In fact, these numbers should be:

	20,000 tpd	16,000 tpd
8-ton	500 gal.	250 gal.
25-ton	160 gal.	80 gal.
22-ton	182 gal.	61 gal.

Thus, if 6.0 gallons per mile are considered for the entire trip (not taking into account greater fuel consumption loaded) and each trip was 75 miles one way, or 150 miles round trip, the fuel consumption should be as follows:

	20,000 tpd	16,000 tpd
25-ton	4,000 gal.	2,000 gal.
22-ton	4,550 gal.	2,275 gal.

A revised Table 50, reflecting these changes, is included in Section VI of the final EIS/EIR. Section IX also notes that the text at the top of pages 574 and 579 should reflect a lower fuel consumption rate. Table 51 appears correct in total, but confusing because it shows 80 trucks traveling 300 miles. In fact, this is the case because each truck will make two round trips per day. This is noted as a footnote on the revised table so as to avoid confusion (see Section VI of the final EIS/EIR).

27. As a requirement of the new federal EPA regulations and RWQCB, a composite liner consisting of a low-permeability soil layer and a high density polyethylene flexible membrane will be placed over the entire area underlying refuse. A more detailed description of the containment system is provided in Section II.B.1 of the final EIS/EIR.

28. Subsequent to the issuance of the draft EIS/EIR, a revised Chapter 15 was issued by the State of California. One of the new provisions of Chapter 15 states: "Waste discharge requirements shall contain a provision which requires the discharger to obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known or reasonably foreseeable releases for the waste management unit." This provision requires the discharger to post a bond to provide for cleanup of any foreseeable release. The amount of the bond is established by the Regional Water Quality Control Board after evaluation of the nature of the refuse, the site characteristics, protection measures, and other factors.

29. The present requirements for landfill closure require the placement of final cover as stipulated in the draft EIS/EIR (page 73). The regulations require the continued maintenance of the final cover to ensure that standing water and/or erosion do not occur, which could lead to the infiltration of surface water. In part, the final cover will include a vegetative layer of one foot minimum thickness as specified by Title 23, CCR, Chapter 15. The purpose of this is to allow natural vegetation to take hold on the landfill cover to provide erosion control.

30. In response to public concerns, an engineering decision was made to design the leachate collection system using a blanket drainage system rather than a series of interconnecting leachate collection pipes operating under a gravity system in the higher elevations and a pump system in the lower elevations as discussed in Section IV.F. of the draft EIS/EIR.

    Please see Response 0001-25. The LCRS blanket drain will be placed on the FML protective geotextile filter fabric. The LCRS geotextile filter fabric will be placed over the upper surface of the LCRS blanket drain to protect the blanket drain from infiltration of fines from the two feet of protective soil cover above the LCRS blanket drain. The protective soil cover will maintain separation between the refuse and the LCRS liner system. The protective soil cover is intended to mitigate potential damage to the underlying drainage system and liner during construction and during initial lifts of refuse filling.

31. The draft EIS/EIR characterizes the general groundwater flows. See Section III.A.1.

32. Hydraulic conductivities are different than flow rates. $K = 1 \times 10^{-2}$ cm/sec is a measurement for hydraulic conductivity (permeability). On the other hand, the flow rate (gradient) is given in ft/yr. See page 132 of the draft EIS/EIR.

    The formula for estimating velocity is the flow rate through fractured and unfractured rock times the hydraulic conductivity of the bedrock. Using K values for fractured bedrock of 1×10^{-2} to 1×10^{-6} cm/sec, velocity estimates range from 0.01 to 100 ft/yr. Or using K values for unfractured bedrock of 1×10^{-9} to 1×10^{-12} cm/sec, velocity estimates are less than 1×10^{-5} ft/yr.

    There is no change in the conclusion of the draft EIS/EIR that groundwater runs generally south/southeast under the site toward the Colorado River. See Figure 47 of the draft EIS/EIR.

33. This comment is correct. A Biological Assessment was prepared for the Section 7 consultation as required by the Endangered Species Act (see Appendix N of the final EIS/EIR).

34. It was decided by the USFWS, BLM, CDFG, MRC, and RECON that a single Biological Assessment (Appendix N of the final EIS/EIR) would be produced that would cover impact analyses and mitigation programs for both federal and state threatened and endangered species, plus candidate species, and any others that these agencies requested. See Response 0164-33.

DOCUMENT 0165 Letter from Burke, Williams & Sorensen, September 23, 1991

1. The land exchange is described in more detail on pages 13-24 of the draft EIS/EIR. Figures 4-10 show the lands on U.S.G.S. quadrangle maps. The existing biological resources on these exchange lands are shown in Figures 57a-57e and Figures 59, 60a-60b, and 62a-62e. Approximately 3,271 acres of publicly owned lands will be transferred to Kaiser Steel Resources, Inc. The exact acreage of the lands to be transferred to federal ownership will be determined by a mineral potential evaluation and a current fair market appraisal. As a result of the land exchange, BLM will receive lands of prime habitat for

the desert tortoise. The land exchange will also contribute to the establishment of a 20,000-acre nature preserve for other endangered, threatened, or sensitive species.

2. This comment does not question the accuracy or adequacy of the draft EIS/EIR but identifies more recent information concerning the waste disposal shortfall that the City of Los Angeles will experience by 1995: "The *Waste By Rail Report* (August 1991) by the Los Angeles County Sanitation District indicates that the amount of solid waste that will need to be disposed of in Los Angeles County will grow to 54,600 tons per day, and that a disposal capacity short fall of 22,300 tons per day will exist in 1995."

3. See Response 0165-1 above.

4. See Response 0165-1 above.

5. This comment does not question the accuracy or adequacy of the draft EIS/EIR but recommends that the discussion of the MRFs and transfer stations be expanded to point out that because curbside recycling has only succeeded in 12-15 percent waste reduction, far short of AB 939 goals, local governments are likely to approve siting proposals for MRFs and that the Eagle Mountain landfill will not accept waste which has not been processed by a MRF or transfer station. Also see Responses 0006-1 and 0015-2.

6. This comment does not question the accuracy or adequacy of the draft EIS/EIR but recommends that the discussion of the No Action alternative be expanded to mention the likelihood that the City and County of Los Angeles will be unable to provide for enough new landfill sites to meet the needs of AB 939.

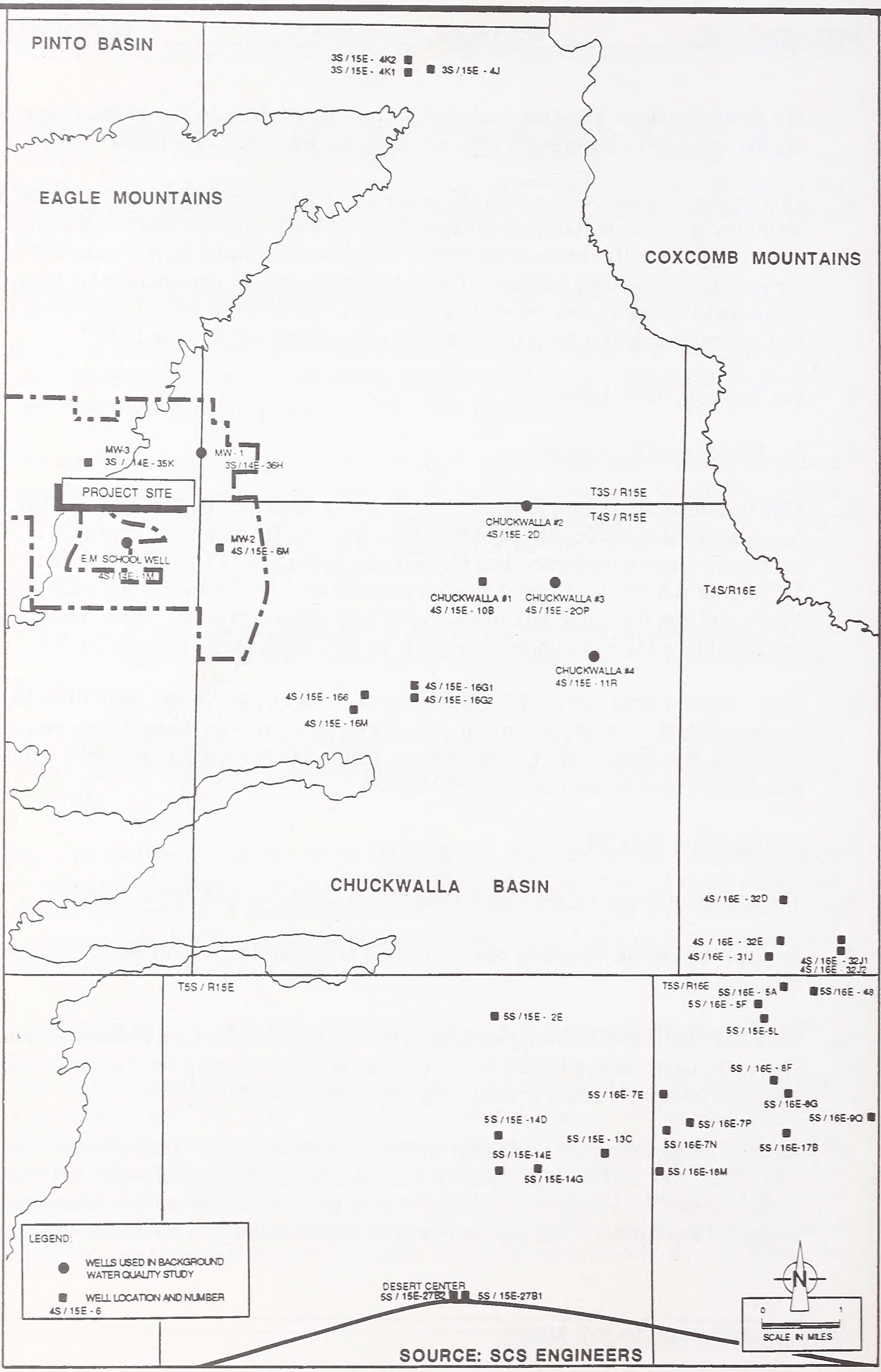
7. See Response 0001-25.

8. The surface drainage for the Chuckwalla Valley basin is closed hydrologically.

9. An approximate site boundary has been added to Figure 45. The revised figure follows this page.

10. See Response 0139-43. An approximate site boundary has also been added to Figure 47. Due to the large scale of Figure 47, the location of the monitoring wells requested in this comment have been added to Figure 48. See Response 0002-13a.

11. As this comment suggests, additional wells have been added to Figure 48 (see Response 0002-13a). The draft EIS/EIR (page 139) shows the potential groundwater use from the northwestern Chuckwalla Valley during 1986 to be 23,000 acre-feet. It is conservatively estimated that overall water use has remained approximately constant since this time.



SOURCE: SCS ENGINEERS

FIGURE 45. WELL LOCATIONS WITHIN 10 MILES OF THE PROJECT

12. This comment does not question the accuracy or adequacy of the draft EIS/EIR but points out that AB 939 requires that cities and counties prepare and implement household hazardous waste elements in their solid waste management plans. This action, coupled with the processing of all waste through a MRF or transfer station, is likely to reduce the amount of household hazardous waste reaching the Eagle Mountain site.

13. Please see Responses 0001-49 and 0003-40.

14. The draft EIS/EIR did consider impacts to the elementary school for each issue in Section IV. No significant impacts to the elementary school were identified in the draft EIS/EIR, and therefore, no further action is required.

15. Please see Response 0001-50.

16. See Response 0157-40 for a discussion of rail accidents in the project vicinity.

17. The potential for accidents with trains is much less than for trucks. This is discussed on page 148 of the draft EIS/EIR.

18. The additional truck traffic required by this proposal will not lower the existing LOS on any of the proposed routes (page 365, draft EIS/EIR).

19. The comment is unclear as to the usefulness of comparing air emission estimates for existing landfill operations in southern California with the corresponding distances from population centers. In order to estimate emissions from landfill gas flares, the draft EIS/EIR (Appendix E, pp. 81-84) discusses emissions from LFG flares at existing landfills in southern California.

20. The Standards of Performance for New Stationary Sources (New Source Performance Standards [NSPS]) are source-specific federal regulations which limit the allowable emissions of criteria pollutants from such stationary sources. The NSPS apply to certain sources depending on the equipment size, process rate, and/or the date of construction or of modification of the affected facility. The NSPS that could apply to the new installations associated with the Eagle Mountain project include the proposed standard of performance for municipal solid waste landfills (40 CFR 60.750).

    On May 30, 1991, the EPA published a draft NSPS for municipal solid waste landfills in the Federal Register. The provisions of this proposed regulation apply to municipal solid waste (MSW) landfills that began accepting wastes on or after May 30, 1991. Therefore, the proposed regulation, as written, will apply to the Eagle Mountain project.

The proposed NSPS requires MSW landfills with a waste capacity of 111,000 tons or greater to calculate non-methane organic compound (NMOC) emissions on an annual basis and to submit the results of these calculations to the EPA. If the calculated NMOC emissions are more than 167 tons per year, the facility must install a landfill gas collection system. The gases in the collection system must be routed to a control or treatment system with a NMOC destruction efficiency of 98 percent or greater. As discussed in the draft EIS/EIR (Appendix E, pp. 81-84), the Eagle Mountain project design complies with these requirements as it includes the installation of a landfill gas collection system equipped with flares capable of a 99 percent destruction efficiency. The EPA draft regulation includes design specifications for vertical well collection systems and lists record keeping, reporting, and monitoring requirements.

The South Coast Air Quality Management District has, by reference, adopted the federal NSPS in its Regulation IX and enforces them as part of its air quality permitting process. Therefore, during the air quality permitting process, Mine Reclamation Corporation must demonstrate that the proposed project meets the requirements of the final version of the federal NSPS for MSW landfills. Generally, however, the SCAQMD's New Source Review rules and source-specific rules will result in more stringent requirements than those demanded by the proposed NSPS for MSW landfills.

21. See Response 0165-20 above.

22. The information on survey corridor widths is contained in Appendix F (page 11) of the draft EIS/EIR. Vegetation along the Eagle Mountain Road and railroad was surveyed and mapped within the entire 200-foot-wide corridor, including 100 feet on either side of the right-of-way.

23. A legend has been added to revised Figure 57a (see Response 0139-74).

24. The term "species diversity" refers only to the number of species observed and does not include a relative abundance aspect. The term "significance" is used not in a statistical sense, but as defined by NEPA and CEQA.

25. Different terms are used in the draft EIS/EIR to describe significant plant and wildlife species, including biological resources of special concern, sensitive species, and significant species. Unfortunately, there are numerous different titles given to various groups of important wildlife and plant species by the different natural resource agencies and some confusion is inevitable. However, under each detailed discussion of a sensitive species in the draft EIS/EIR, it clearly states the species' exact status with the different resource agencies. Table 3, in Appendix F, also clearly indicates the status of each sensitive species.

26. In Appendix F, Table 3, the designation "California Species of Special Concern (S)" should be added for the yellow warbler.

27. The only area that would qualify as a wetland within the project boundary would be near the train trestle on Salt Creek. Other washes and drainages in the project area, although they may be jurisdictional waters of the U.S., are not considered wetlands under current state and federal classifications.

28. The updated Mitigation Reporting/Monitoring Program is located in Section II.C. of the final EIS/EIR.

29. This comment does not question the accuracy or adequacy of the draft EIS/EIR but provides recent information about potential increases in Los Angeles County tipping fees. This information concludes that in five years County tipping fees may rise above $65 per ton, while rail haul fees will be approximately $55 per ton.

30. Table 42 of the draft EIS/EIR has been retitled as "Active and Potentially Active Faults near the Project Site" to more accurately reflect the maps of the California Division of Mines and Geology. On this table, only 3 of the 12 faults have been active historically, including the San Andreas and the two segments of the San Jacinto fault. All other faults on Table 42 show evidence of Quaternary movement, that is, they may have moved within the past two million years. Also the heading for the third column of Table 42 will be revised to read Maximum Characteristic (Probable) Earthquake (M). These changes appear in the revised table, following this page.

31.-36. The writer of this letter expressed that he had no comments on the following sections of the draft EIS/EIR: Visual, Recreation, and Wilderness Resources; Utilities and Services; Noise; Cultural Resources; Paleontology; and Energy Consumption/Generation.

37. See Responses 0165-5 and 29 above.

38. See Responses 0165-5 and 29 above.

39. The benefits of the Eagle Mountain project to the surrounding communities are addressed in Section IV.H. of the draft EIS/EIR. See Response 0111-3.

40. This letter expresses "no comments" on the draft EIS/EIR's section called Significant Irreversible Environmental Changes.

TABLE 42
ACTIVE AND POTENTIALLY ACTIVE FAULT ZONES NEAR PROJECT AREA

Fault Name	Distance from Site (miles)	Maximum Characteristic Earthquake (M)
Blue Cut	21	6.8
Pinto Mountain	25	7.3
Bullion Mountain	26	6.2
San Andreas	34	7.5
Mesquite Lake	35	7.0
Ludlow	44	6.2
Banning	45	6.4
Emerson	55	6.4
Hidalgo	56	6.8
San Jacinto (Casaloma-Clark branch)	57	7.1
Calico	60	7.0
San Jacinto (Coyote Creek branch)	62	6.6

DOCUMENT 0166 Letter from U.S. Department of Agriculture, Soil Conservation Service, October 21, 1991

1. Decomposition of the refuse is both an aerobic and anaerobic process. Gases present in the refuse (including oxygen) are removed from the refuse mass to maintain a negative pressure to control the escape of LFG and to lower the potential for subsurface fires. Specifications for daily cover material and the LFG removal system are established by regulations and by state agencies, not by the project applicant. The implication that these regulations do not consider the promotion of decomposition is correct. Implementation of the solid waste reduction provisions of AB 939, however, will involve the removal of some of the decomposable materials in the solid waste stream—vegetative waste—which will be composted and recycled.

DOCUMENT 0167 Letter from Lucinda B. Killebrew, no date

1. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. The air pollution caused by the truck component of the project is very minimal compared to that caused by the train component. Additionally, the truck component of the project will be reduced from 200 to 100 trips daily, though the associated reduction in air emissions would be incremental.

2. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. As a Class III landfill, no hazardous materials would be accepted at the site. The process to remove hazardous materials from the waste stream is described in the draft EIS/EIR (pp. 39, 49, and 331-333). Also, see Response 0111-43.

3. Since the preparation of the draft EIS/EIR, proposed truck traffic has been decreased by one-half, from 200 to 100 round trips per day. After three years, only truck traffic from the desert communities will be allowed to haul waste to the Eagle Mountain landfill. The reduction in truck traffic is addressed in Section II.B.2 of the final EIS/EIR. The impacts of truck traffic are discussed in Section IV.C.3 in the draft EIS/EIR.

DOCUMENT 0168 Letter from Dan Lewis, no date

1. The project's air impacts are presented in Section IV.D. of the draft EIS/EIR and are summarized in Response 0026-8.

2. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. MRC would only indirectly enforce compliance with MRF operators for the removal of recyclables (and hazardous materials) through the mechanism of not accepting residual wastes unless the unacceptable materials have been

removed. Compliance with the standards of removal will be enforced by on-site inspectors directed by and with the authority of the Riverside County Department of Health (the Local Enforcement Agency).

3. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary. However, the one significant and unmitigated environmental impact identified in the draft EIS/EIR is air.

4. See Response 0006-1. Refuse destined for landfilling at Eagle Mountain must comply with the provisions of AB 939, the "Recycling Bill." Such compliance means that the refuse has been subjected to an inspection program to ensure the adequate removal of recyclables and hazardous materials. If refuse does not comply, it will not be taken to Eagle Mountain.

DOCUMENT 0169 Letter from Dollie Irwin, Patsy Mahoney, Carolyn Toenjes, September 20, 1991

1. Pages 9-11 of the draft EIS/EIR identify the agencies, organizations, and persons to whom copies of the draft EIS/EIR were sent. The draft EIS/EIR, including appendixes, are available for review at those offices. In accordance with CEQA, all comments received on the draft EIS/EIR during the public review period are included in Section VII of the final EIS/EIR.

2. The requested information relative to County applications is on file with the Riverside County Planning Department.

3. The purpose and the need for the Eagle Mountain project are explained in detail on pages 4 and 5 of the draft EIS/EIR.

4. The County applications were filed by the applicants' representative, SCS Engineering, and accepted by the County Planning Department on June 8, 1989.

5. See Response 0169-4 above.

6. The Notice of Scoping Meeting was the County's first public notice on the proposed project.

7.-10. These comments do not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

11. The financial benefits of the proposed landfill operations to Kaiser Steel retirees are outlined on pages 475-476 of the draft EIS/EIR. Also, see Response 0102-12.

12. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

13. The MOU is available at the Riverside County Planning Department, as are many other documents referred to in the draft EIS/EIR but not attached as an appendix. Since this comment does not address the adequacy or accuracy of the draft EIS/EIR, no further response is required.

14. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

15. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

16. Due to the significant air quality impacts, no incineration activities would occur at Eagle Mountain. Any proposal for incineration would require separate County and environmental review. See Response 0026-75.

17. See Response 0015-2. Hazardous waste and recyclables will be removed from the waste stream at the MRF or transfer station, regardless of its location.

18. The removal of hazardous waste from the waste stream is described in the draft EIS/EIR (pages 39, 49, and 331-333). Also see Response 0001-117 for a list of the materials not accepted in a Class III landfill. See Response 0111-43 for a more detailed discussion of this process.

19. See Response 0096-14.

20. It is possible that a professional pest control company would be hired to control insects and rodents, if necessary.

21. Page 332 of the draft EIS/EIR states that hazardous wastes derived at the landfill (e.g., paints, fuel oil, and solvents from maintenance activities; the organic phases from leachate or landfill gas condensate; and small quantities of hazardous materials recovered from the on-site waste inspection facility) will be segregated and containerized as required by regulations and temporarily stored on-site. These wastes will be periodically removed from the site to a licensed hazardous waste facility by a licensed hazardous waste carrier under manifest as required by state law.

22. All radioactive materials are considered hazardous and unacceptable at Eagle Mountain. Methods of detection and removal of hazardous waste from the waste stream are

described on page 332 of the draft EIS/EIR. For a more detailed description of this process, see Response 0021-15.

23. The allegations of illegal dumping at Eagle Mountain have been reported to the Riverside County Department of Environmental Health for investigation. They do not relate to the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

24. See Response 0169-23 above.

25. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

26. The allegations of hazardous materials already present at Eagle Mountain have been reported to the Riverside County Department of Environmental Health for investigation. They do not relate to the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

27. See Responses 0026-19 and 0109-1.

28. See Response 0164-28.

29. See Responses 0026-19, 0109-1, and 0164-28.

30. The specific mitigation and monitoring measures referred to on page 31 of the draft EIS/EIR are identified for each issue in Section IV, Environmental Consequences. Additionally, these measures are provided in Appendix K of the draft EIS/EIR. For an updated Mitigation Reporting/Monitoring Program, see Section II.C. of the final EIS/EIR.

31. Page 4 of the draft EIS/EIR states that the need for new refuse disposal facilities exist for Los Angeles, San Bernardino, Riverside, and Orange counties, with the greatest need occurring in Los Angeles.

32. The sources for the information provided in paragraph 3 of the draft EIS/EIR are referenced within that paragraph (City of Los Angeles, County of Los Angeles, and Los Angeles County Sanitation Districts 1988). Also, see Response 0165-2.

33. See Responses 0021-7 and 0026-3.

34. See Responses 0021-7 and 0026-3.

35. The draft EIS/EIR uses the worst-case scenario when assessing impacts for each issue addressed. The impacts and mitigation measures for each issue are discussed in Section IV, Environmental Consequences. The detailed Mitigation Reporting/Monitoring Program is included as Section II.C. of the final EIS/EIR.

36. See Response 0001-25.

37. The draft EIS/EIR states that the presence of the landfill has the potential to be a significant impact to the desert tortoise due to increased predation by ravens attracted to the areas by the landfill refuse (see draft EIS/EIR, pp. 446-449 and Appendix F, pp. 70-71). The document proposes to monitor both tortoise and raven populations throughout the life of the landfill project. If the raven population is found to increase to a level that threatens tortoise populations, then an active raven control program will be instituted. All permits to institute this program will be in place before landfill operations begin, so that a quick response to a threat to the tortoise is possible.

38. The impact and mitigation measures for biological resources are discussed in Section IV.G. and Appendix F of the draft EIS/EIR and are included in the Biological Assessment (Appendix N of the final EIS/EIR) and the revised Mitigation Reporting/Monitoring Program (Section II.C. of the final EIS/EIR).

39. See Responses 0128-10 and 0165-1.

40. The compatibility of the proposed project with surrounding land uses is discussed on pages 434-436 of the draft EIS/EIR.

41. The project boundary's closest point to Joshua Tree National Monument is approximately 8,000 feet (roughly a mile and one-half) to the southeast (page 188 of the draft EIS/EIR). The draft EIS/EIR concludes impacts to Joshua Tree National Monument are considered not significant.

42. The raven control and monitoring program is described in the draft EIS/EIR (pages 450-451) and in Appendix F. Initially, a raven population monitoring program will be implemented. The second phase would be to implement a passive raven control program which includes such measures as placing a daily cover over the trash, perch site reduction, and firecrackers. The effectiveness of each phase will be monitored. If additional measures are deemed necessary, then an active raven control plan which involves destruction would be implemented. As stated on page 451 of the draft EIS/EIR, a detailed raven control plan, plus the appropriate permits will be in place before landfill operations begin. All programs will be undertaken in conjunction with USFWS, BLM, and CDFG and with the Raven Management Plan for the California Desert Conservation Area (BLM 1990). The BLM is currently conducting research on the effects of the raven on the desert

tortoise. Additional measures for raven control resulting from this research will be considered. Also, see Response 0095-2b.

43. The Joshua Tree National Monument boundary adjustment is discussed on pages 188-191, and 277 of the draft EIS/EIR. Figure 55 illustrates the boundary adjustment proposal. Pages 439 discusses the project's effect upon the BLM boundary modifications with respect to Joshua Tree National Monument.

44. The socioeconomic effects of the project are outlined in Section IV.H. of the draft EIS/EIR. Also, see Response 0111-3.

45. No, trash cars will not be added to any other trains.

46. Pages 356 and 357 of the draft EIS/EIR state that the proposed project would be capable of accepting up to six unit trains per day at the container handling yard. When operating at full capacity, an average of 4.7 trains per day would be needed. The trains would consist of one or more diesel electric locomotives carrying up to 14 railcars. Each car would be 256 feet long and would be less than 4,000 feet long (page 50 of the draft EIS/EIR). Six trains are the maximum to be used in a 24-hour period. The noise impacts from railroad operations are presented in Section IV.L.2 of the draft EIS/EIR. A more detailed analysis can be found in the noise technical report, Appendix H.

47. See Response 0169-1 above.

48. Loaded containers, under normal operations, would not remain idle for more than a few hours, depending upon operating schedule. Loaded containers will stand at the MRF or container marshalling yard during the loading or unloading of a unit train. This total time is not expected to exceed five to six hours. Loaded trains may await switching at Ferrum Junction for two to six hours, possibly a day. Potential odor impacts that could result from parked trains in-transit to the landfill are discussed in Response 0001-97.

49. Average daily train volumes presently occurring on the rail lines that may be utilized by the project range from 30 to 50 trains per day. An additional maximum of six round-trip trains per day would not result in significant impacts to the land uses along the rail line. Noise impacts from railroad operations are presented in Section IV.L.2 of the draft EIS/EIR. The property values for houses in close proximity to the rail line would not be affected by an additional six trains per day. The transfer stations would be located in industrial areas along the railroad and would therefore not affect property values.

50. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

51. This comment does not address the adequacy or accuracy of the draft EIS/EIR, and therefore, no response is required.

52. As stated on page 39 of the draft EIS/EIR, the maximum capacity of the initial container handling yard would be approximately 4,750 tons per day made up of one trainload of refuse per day (3,500 tpd) and 1,250 tpd that would be delivered by truck. The maximum capacity of the landfill would be 20,000 tons of refuse per day (pages xvii, 1, 13, and 39). The draft EIS/EIR states that the capacity of the Eagle Mountain landfill is over 100 billion cubic yards. However, this was a miscalculation. Please refer to Response 0139-22 for clarification.

53. Design features incorporated into the project would avoid potential impacts to surface drainage (see Section IV.F. of the draft EIS/EIR). No drainage from the proposed project will be directed toward the open Colorado River Aqueduct. Where drainage is planned to cross the covered portion of the aqueduct, MWD will be consulted as to design and location.

    Copies of the drainage report and detailed plans have been forwarded to MWD for review. All drainage facilities for conveyance of flow over the aqueduct will be reviewed and approved by MWD prior to construction. The drainage report is provided in Appendix L of the final EIS/EIR.

54. The Eagle Mountain landfill will only accept nonhazardous municipal solid waste and construction debris waste. A description of the materials acceptable at the proposed Class III landfill is provided on page 48 of the draft EIS/EIR. Page 49 identifies unacceptable waste. Since a Class II landfill is not part of the proposed action, it is not necessary to describe its components in this environmental document.

55. See Response 0111-43.

56. The activities identified on pages 34 and 35 of the draft EIS/EIR are all part of the proposed action.

57. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

58. There is no working relationship between MRC, Southern Pacific Transportation Company, and Western Waste Industries. There is no joint venture between MRC and these companies, nor has there ever been such a relationship.

59. No assurances and guarantees were given to MRC in 1982 or at any other time by any person or company.

60. Mine Reclamation Corporation is the lessee of the underlying properties owned by Kaiser Steel Resources Corporation at the Eagle Mountain site under a 99-year lease. The property is privately owned and the project is being privately developed. As such, MRC is not required to have any permit or license issued by any governmental agency at this stage in the development of its plans for the project and for the conducting of technical studies of the air, water, geology, and other technical particulars on the site. The draft EIS/EIR, and its underlying technical investigations and analyses, is being prepared by the joint lead agencies of the BLM and Riverside County and their independent contractors, and as such, is conducted under the authority of the California Environmental Quality Act and the National Environmental Quality Act. MRC does not have any permits or licenses for the landfill project itself, but is seeking these approvals under the various local, state, and federal authorities outlined in the draft EIS/EIR (pp. 11-12) and only after approval and certification of the final environmental documentation by the lead agencies.

61. The public process allows the elected Board of Supervisors to engage in certain agreements with individuals and corporations without hearings and public input. The formulation of the Memorandum of Understanding for this project is such an agreement. Since this comment does not question the adequacy or accuracy of the draft EIS/EIR, no further response is necessary.

62. The table of contents in the draft EIS/EIR is in compliance with CEQA guidelines and is considered to be thorough and complete; therefore, no change is deemed necessary.

63. This comment does not question the adequacy or accuracy of the draft EIS/EIR, and hence, no response is necessary.

DOCUMENT 0170 Letter from U.S. Environmental Protection Agency (Region IX), September 30, 1991

1. Each of these concerns are identified in greater detail in subsequent comments within this letter, for which responses are provided below.

2. The control measures incorporated in the State Implementation Plan (SIP) for a given planning area are contained in the air quality regulations for that area. The South Coast Air Quality Management District will be responsible for reviewing the permit applications for the proposed project to insure that the project is in compliance with SCAQMD air quality regulations. By satisfying the requirements of these air quality regulations, the proposed project will conform with the SIP for the Southeast Desert Air Basin portion of Riverside County.

Due to a lack of available on-site monitoring data during the preparation of the draft EIS/EIR, conservative screening level modeling techniques known to overpredict air quality impacts were used for all analyses. The collection of on-site air quality and meteorological data has recently been completed. This on-site data was used to revise the air quality modeling analysis of the project. The results of the revised modeling analysis are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. The results of the revised modeling show that project impacts will not exceed either federal or California ambient air quality standards for CO, NO2, and SO2. Furthermore, the revised modeling show that cumulative impacts will not exceed the annual average PM10 federal and California standards. Project impacts alone for PM10 are well below 24-hour average federal and California ambient air quality standards. However, the highest average PM10 ambient values measured on-site exceed the 24-hour average PM10 federal and California standards. Therefore, when project impacts are added to the maximum measured background levels the resulting cumulative impacts would exceed the 24-hour average federal and California ambient air quality standards.

In addition, the SCAQMD's New Source Review (NSR) rule requires that an applicant demonstrate with modeling that a new facility will not cause a significant impact on air quality. The significant impact levels defined in the NSR rule are restrictive enough to ensure that a new project will not cause or contribute to a new violation of state or national ambient air quality standards. Therefore, compliance with the SCAQMD NSR rule will ensure that the proposed project will not cause or contribute to a new violation of state or national standards.

3. The question of Prevention of Significant Deterioration applicability is discussed in the draft EIS/EIR. The emission estimates contained in Appendix E of the draft EIS/EIR suggested that the proposed project, with mitigation, would not trigger federal PSD review. Mine Reclamation Corporation submitted a PSD applicability determination request to the New Source Section, EPA, Region IX, which found PSD not applicable.

4. On the contrary, the draft EIS/EIR devotes considerable attention to alternatives. Several project specific alternatives (described on pages 74-77) are analyzed throughout the report, including quantitative comparisons with the proposed project where appropriate. Alternative sites, including alternate desert locations as well as alternate conventional landfill sites not relying on rail transport, are discussed on pages 77-104. Other technologies or waste diversion programs are discussed on pages 105-109.

5. The promotion of waste reduction programs is mandated by California state law, as discussed on page 105 of the draft EIS/EIR.

6. See Response 0170-2.

7. See Response 0170-2. It is not necessary to use the emissions model used in the State Implementation Plan to ensure consistency of emission factors used for existing sources in the project area. These emission factors are contained in the SCAQMD Emissions Inventory for Riverside County. If it is necessary to model emissions from existing sources in the project area, the SCAQMD emissions inventory will be reviewed.

8. Pages 124 to 131 of Appendix E discuss the air quality mitigation measures, and list the company or government agency responsible for implementing the measures as well as the government agency responsible for enforcing the mitigation measure. Pages 131 to 138 discuss the effectiveness of the mitigation measures. All of these mitigation measures are included in the mitigation monitoring plan in summary form. The updated Mitigation Reporting/Monitoring Program is contained in Section II.C. of the final EIS/EIR.

9. This comment concurs with the requirements contained in the mitigation section of the draft EIS/EIR (Measure AQ-23) that a reanalysis of air quality impacts be performed using ambient data collected on-site. Since the preparation of the draft EIS/EIR, the modeling required in Mitigation Measure AQ-23 has been conducted and Mitigation Measure AQ-23 is now deemed complete. See Response 0003-2.

10. As suggested in this comment, this response reflects the addition of a new mitigation measure to reduce PM10 emissions (see Section II.C. of the final EIS/EIR). The new measure is as follows:

> On-Site Wheel Washing Stations. MRC shall install on-site wheel washing stations through which all haul trucks will be required to pass prior to leaving the landfill area. This will prevent debris from being deposited on road surfaces and from becoming a nuisance and/or a source of particulates.

The feasibility of railway electrification is discussed in Appendix E (pp. 116-117) for the 52-mile stretch of track between Ferrum Junction and the landfill site. Electrification of the Eagle Mountain rail line is not considered feasible at this time because of the steep grades and several major turns in the rail line (page 386 of the draft EIS/EIR). Also, the costs and physical disturbance necessary for the installation of the catenary cable power system reduce the feasibility of this measure. The continued review of the feasibility of electrification of the railway is part of the project's mitigation measures (AQ-10). The electrification of the Eagle Mountain railway will be evaluated when sufficient landfill gas is generated to provide the required electrical energy. Table FEIR-AQ-5 (Appendix M, Attachment 2 of the final EIS/EIR) shows the reductions in locomotive-generated emissions which could be achieved if electrification of the Eagle Mountain rail line is found to be feasible.

11. The total initial construction time for the proposed Eagle Mountain landfill project is estimated to be approximately 20 weeks. There will be no lasting impact on any state or federal air quality standard due to the short-term nature of these emissions. Therefore, because construction emissions will be temporary, it was concluded that the emissions are not significant. An estimate of the heavy equipment exhaust and fugitive dust emissions associated with the construction of the Eagle Mountain project, along with suggested mitigation measures are included as Attachment 6, Appendix M of the final EIS/EIR. The principles or practices embodied in the mitigation measures for control of emissions associated with construction equipment and activities are identical to those practices already identified for the control of vehicle emissions and fugitive dust associated with ongoing operations at the landfill.

12. Concerns of the National Park Service, as presented in their letters, are noted in the draft EIS/EIR on pages 166 and 169. Mitigation Measure AQ-23 in the draft EIS/EIR requires a reanalysis of ambient air quality impacts, including those at the Joshua Tree National Monument, and requires that Mine Reclamation Corporation develop and submit for approval additional mitigation measures as needed to mitigate remaining significant impacts at the monument.

    The revised air quality modeling using actual weather data collected on-site has been completed and the results are summarized on modified tables (Tables 29, 36, 49, and 52) and associated plots of project impacts in Attachment 5, Appendix M of the final EIS/EIR. The results of the revised modeling show that project impacts (including those at the Joshua Tree National Monument) will not exceed federal Class I and II increments and will not exceed either federal or California ambient air quality standards for CO, NO_2, and SO_2. Project impacts alone for PM10 are well below federal and California ambient air quality standards. Furthermore, the revised modeling show that cumulative impacts will not exceed the annual average PM10 federal and California standards. However, the highest background PM10 ambient values measured on-site exceed the 24-hour average PM10 federal and California standards. Therefore, regardless of the magnitude of project PM10 impacts, when project impacts are added to the maximum measured background levels the resulting cumulative impacts still exceed 24-hour average federal and California PM10 ambient air quality standards.

13. This comment concurs with the conclusions of the draft EIS/EIR.

14. As described on page 12, and elsewhere throughout the draft EIS/EIR, the project involves much more than mere close coordination with the RWQCB—the issuance of waste discharge requirements by the RWQCB involves a very detailed review and analysis of the project design, and specifications for monitoring and enforcement to insure compliance with applicable plans. Additional information is provided in Response 0001-1.

15. See Responses 0002-3, 4, 5, and 6.

16. See Responses 0001-111 through 116. The contribution of the Eagle Creek catchment area to the Chuckwalla Valley is less than 10 percent. Only a portion of this area will be covered by the landfill. Only the direct infiltration of precipitation on the landfill will be lost. Approximately 5 percent of the precipitation is estimated to directly recharge the groundwater system. Therefore, the total amount lost from recharging the basin will be the area of the landfill covered at that time times the precipitation on that area times 5 percent. For example, if 2,000 acres are covered and 3 inches of precipitation occur that year, 25 acre-feet may be lost.

17. Please refer to Response 0001-24.

18. The proposed liner, leachate collection, and gas collection systems will comply with RWQCB regulations. The design of the composite liner, consisting of a minimum of two feet of clay and a high density polyethylene flexible membrane, will be consistent with the new federal EPA requirement. A description of the proposed liner is provided in Response 0002-4. The potential for groundwater contamination is discussed in Responses 0001-25 and 0001-33.

19. See Response 0170-16 above.

20. As a requirement of the new federal EPA regulations and RWQCB, MRC proposes that a composite liner consisting of a minimum of two feet of clay and a high density polyethylene flexible membrane be placed over the entire area underlying refuse.

21. Please refer to Responses 0001-10, 11, and 121.

22. Please refer to Responses 0001-10, 11, and 121.

23. See Responses 0001-25 and 28 for a discussion of potential contamination of groundwater.

24. See Responses 0001-18, 25, 28, 29, 33, and 36.

25. Conservative aspects of the LCRS design are noted in Response 0001-15. Installation and performance characteristics of the composite liner are discussed in Responses 0001-4 through 13.

26. Appendix L of the final EIS/EIR contains the project drainage plan. It provides a description and evaluation of the proposed temporary drainage control measures.

27. The potential impacts of the Eagle Mountain Road Extension and new railway spur on the existing drainage patterns are addressed on page 443 of the draft EIS/EIR. A more detailed discussion of the existing and proposed drainage patterns are provided below. Also, the updated drainage report is contained in Appendix L of the final EIS/EIR.

    The existing drainage patterns will be impacted to a minimal degree by the Eagle Mountain Road extension and the proposed railroad spur. Within the southerly 1.1 miles of the road extension, with one exception, the contributing drainage areas are very minor in nature and will be perpetuated by the use of several small culverts. The one exception is the overflow from the MWD pumping plant fore-bay, which only occurs in the event of an emergency shut down of the facility within the Eagle Mountain tunnel. The design of the overflow crossing of the road extension will be sufficient to accommodate the flow that can pass the concrete box under the pumping plant access road and the trestle on the existing railroad immediately upstream from the road extension.

    The next 1.6 miles of the proposed road extension will be constructed adjacent to the existing railroad on the downstream side. The drainage facilities crossing under the existing railroad will be reconstructed as needed and will be extended under the road section to perpetuate existing drainage patterns. The proposed railroad spur and road extension into the landfill area is to be located adjacent to and upstream from the Colorado River Aqueduct (CRA). It is planned to provide drainage facilities under the railroad and road directed at existing drainage crossings of the CRA. Downstream from the aqueduct crossing the storm flows will be allowed to spread out into their current drainage patterns.

28. All key drainage facilities will be designed for 100-year storm flows for the most critical events ranging from 1-, 3-, 6-, and 24-hour duration storms. In addition, a 500-year frequency standard will be adopted for review of channel freeboard design. Riverside County Flood Control District suggests, based on their experience, that this provides the most conservative design storm to use in desert areas and provides for the highest intensity of runoff. Figure 56 of the draft EIS/EIR provides the information requested in this comment.

29. Design of drainage facilities will utilize 1991 aerial topography and the most current government topographic mapping. Eagle Creek currently flows into the East Pit.

30. The project impacts to the nearby wells, springs, and subsurface flow are fully evaluated on page 328 of the draft EIS/EIR.

31. See Response 0001-43.

32. See Response 157-64.

33. For each issue discussed in the draft EIS/EIR, impacts associated with each alternative are provided, including the proposed action, the reduced landfill operations alternative, the proposed action with rail access only alternative, and the no action alternative. Since the project has the objective of providing landfill capacity, the no project alternative was analyzed primarily from the perspective of no action at the project site in conjunction with the continued reliance on conventional landfills. Thus, the no project alternative avoids changes at the project site, but does result in impacts such as continued air emissions in the South Coast Air Basin described on pages 393-396. While brief, the discussion of the current Surface Mine and Reclamation Act reclamation plan on page 75 is an accurate summary of the existing Kaiser Steel Resources plan. This current plan is limited to the following actions: removal of old mining equipment (which is ongoing), minor drainage improvements, and allowing natural revegetation to proceed. The EIS/EIR concludes that the Eagle Mountain Energy Company project is "speculative and remote and not reasonably foreseeable." Therefore, the potential for implementation of this project is unknown. See Responses 0152-1 through 0152-11.

34. At the present time it is difficult to estimate the probability of implementation for the various alternative sites and projects. Within the potential wastesheds reviewed in the draft EIS/EIR (pages 4-5), approximately 70,000 tons per day of municipal solid waste are generated. Thus, it would be possible to operate the proposed project at full capacity, operate the Amboy project at full capacity, and still have a need for additional disposal capacity fulfilled by conventional landfills. Since it will be some years before any of the remote disposal facilities can operate at full capacity it is more difficult to predict how disposal capacity will be provided. In general, solid waste departments are planning for all contingencies—proceeding with recycling and diversion programs, expanding the capacity of existing landfills, permitting for new landfills, and cooperating with potential remote disposal projects. While some short-term market advantage may be gained by the first remote disposal site to become operational, given the expected lifetimes of these projects they are not mutually exclusive.

    AB 939 mandates reductions in solid waste disposal volumes and places the responsibility for achieving the reductions on local jurisdictions. The precise tactics to accomplish the reductions, mandatory source separation, green material recycling, pricing mechanisms, acceptance criteria, and others will be developed in an integrated manner by the Riverside County Waste Management Department and other local governments. Regardless of the success of these programs, the need for continued disposal capacity will remain. See Response Number 0006-1 for additional information.

35. The impacts associated with the proposed action's off-site improvements (the road and railroad rights-of-way and the land exchange) are discussed in Section IV. Environmental Consequences of the draft EIS/EIR for each individual issue.

36. See Response 0015-2.

37. See Response 0015-2.

38. The project applicant will work closely with local, state, and private entities in the development of future solid waste processing and transfer stations which may serve the landfill in the future.

39. See Response 0149-10.

40. See Response 0165-1 above.

41. See Responses 0165-1.

42. See Responses 0059-1 and 0083-3.

43. Figure 99 of the draft EIS/EIR illustrates the 75 dBA noise contour line for the proposed landfill operations. As shown on this figure, the residential land uses of the Eagle Mountain townsite would not be exposed to noise levels in excess of 75 dBA.

44. A formalized closure and postclosure maintenance plan will be submitted to the RWQCB within 180 days of the termination of each area's phase of waste disposal, according to CCR Title 23, Article 9, Chapter 15, Section 2597.

    MRC will be responsible for all aspects of post-closure monitoring and controls. The closure and post-closure costs will be formatted according to Title 14 of the California Code of Regulations and will include a letter of credit which is a demonstration of financial responsibility for closure and postclosure costs and a financial means test and guarantee demonstrating responsibility for closure of the site.

45. Please refer to Response 0001-10, 11, and 121.

46. There is no evidence that bighorn sheep disperse across the Eagle Mountain rail line right-of-way. Should a bighorn sheep be on the tracks at the time a train approaches it certainly is agile enough to avoid being hit. Sheep are also somewhat tolerant of human impacts activity, and it seems unlikely that the level of train traffic projected for the rail line would represent a significant barrier to sheep movements.

47. The anticipated growth associated with proposed landfill operations is discussed in Section IV.H.1 of the draft EIS/EIR. Utilities and community facilities are presently in place at the Eagle Mountain townsite to accommodate the anticipated increase in population associated with the landfill. The draft states that growth will be neither

discouraged or encouraged in the region by the denial or approval of the proposed project, and therefore, approval of the project is not considered a significant regional growth-inducing impact.

48. Please refer to Response 0025-8.

49. The local Desert Center dump will remain open to accept locally generated waste until the Eagle Mountain landfill facilities are in place and operations commence. There is no inspection or sorting of refuse at the Desert Center dump.

50. Presently, access to the site is restricted and minimal patrolling occurs. If the proposed landfill project does not occur, and no other active uses are pursued at the site, then the existing reclamation plan would take effect. Upon implementation of the current reclamation plan, fencing and access restrictions would remain in some areas. The level of patrolling, maintenance, and the effectiveness of access restrictions over time are all uncertain, however, under the "No Project" alternative.

51. The major outcome of FLPMA affecting the area of the project was the preparation of the BLM's California Desert Conservation Area Plan (1980), pursuant to Section 601 of FLPMA. Consistency with the CDCA Plan is the most pertinent requirement of FLPMA. The land exchange itself is necessary to provide consistency with the CDCA Plan, as discussed on pages 178-187 of the draft EIS/EIR. The draft EIS/EIR reviews the other major applicable processes under FLPMA on pages 13-15 in discussing the proposed land exchange. A general description of the proposed rights-of-way is provided on pages 25-31; a legal description will be necessary as part of the legal documentation of the rights-of-way.

52. The Biological Assessment was prepared for the Section 7 consultation as required by the Endangered Species Act (see Appendix N of the final EIS/EIR).

53. The "Responsible Agency" which appears in the fourth column of the Mitigation Monitoring Plan in Appendix K of the draft EIS/EIR is the agency responsible for assuring that the mitigation measures are carried out. A revised Mitigation Reporting/Monitoring Program has been prepared and is included in Section II.C. of the final EIS/EIR.

SECTION VIII

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SECTION IX

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